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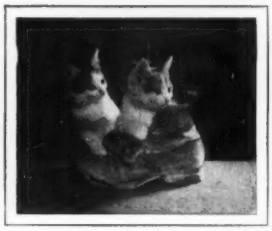

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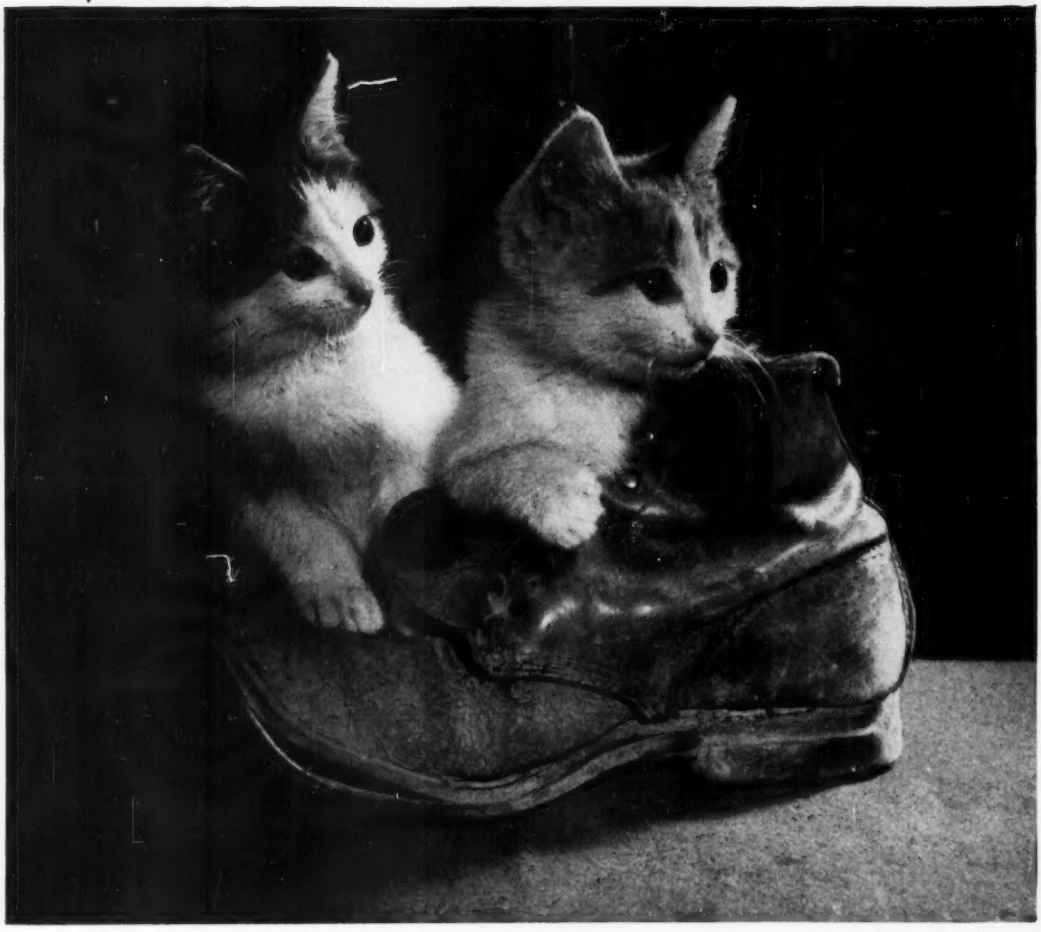

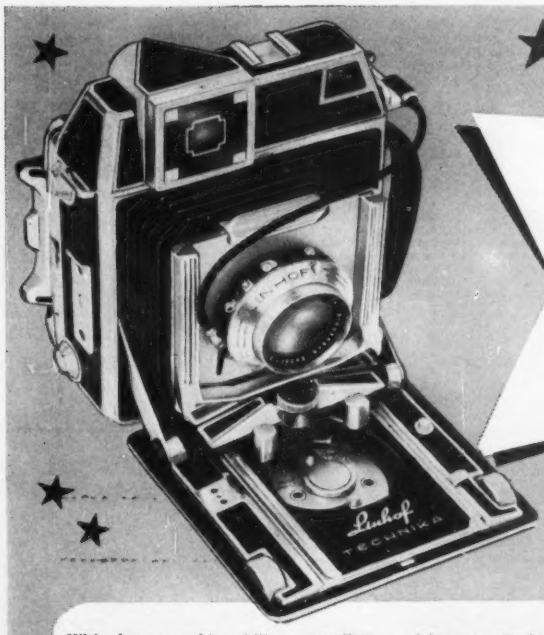

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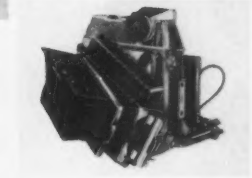

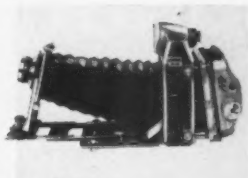

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American PHOTOGRAPHY

OCTOBER 1952
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## OUR OCTOBER COVER

Our October cover is by Stanley Silver who, together with his father and brother, has established the Silver Studio in New York, an undertaking that has won a reputation as an illustrator's studio in the space of just a few years. Stanley says he doesn't specialize, but that his work ranges from "babies to babes."

## ARTICLES



## DEPARTMENTS



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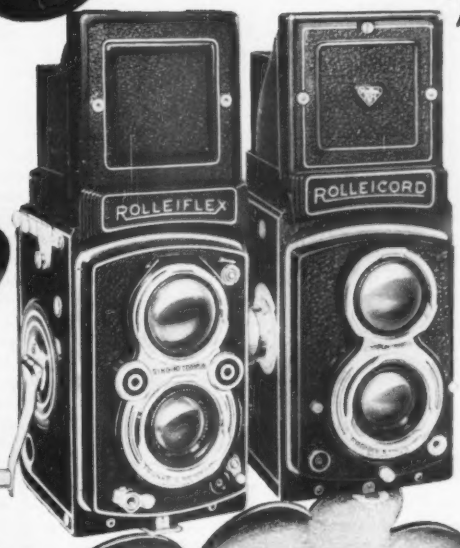


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# Notes From A Laboratory

By Herbert C. McKay

## Stereo Mounts

A situation has developed in connection with stereo mounts which, although not of vital importance in itself, does cast a threatening shadow over the future of stereo through following a pattern which could become very serious indeed. Therefore I wish to point out some of the implications.

Some three quarters of a century ago, one editor of an amateur magazine estimated there were more than 50,000 active amateur photographers in the country. This was in the days before rollfilm when even the future of dry plates was dimly regarded. But at that same time there was probably not one photo dealer in the whole country who did not stock a fairly complete line of stereo cameras and accessories. Every professional photographer was expected to be able to produce stereos upon request. Stereo was as firmly established as any form of photography. Why then did it die out?

Because the market was flooded with both stereo apparatus and stereo pictures produced by people who lacked the most elementary stereo theory! Stereo viewing became synonymous with eyestrain, headaches and nausea. The result was exactly what it had to be. Stereo rapidly lost favor in the eyes of the public.

It has been said that the automobile, the radio and improved communications killed stereo. Nonsense! The fallacy of that reasoning is shown by the fact that these elements do not affect stereo today when despite automobiles *and* airplanes, movies *and* television, stereo is booming.

The truth is that the people responsible for stereo deliberately killed it in their effort to wring greater profits from it! Does that sound familiar? It should. It has been done time after time, but stereo is particularly vulnerable in this respect. All we need is a flood of poorly mounted slides. Cheap viewers with mismatched and misaligned lenses—and stereo will again be buried.

The mount factor, fortunately, is not one of those things which can seriously endanger stereo because it is almost harmless. It does serve, however, to show how engineering based upon a faulty knowledge of stereo principles can violate those principles while seeming to add something of value to the art.

This factor is that of the mask spacing. It is known of course, that while the average interpupillary is some 65mm, there are many people who have eyes set considerably closer. Therefore the argument has been projected that picture spacing should be less than the closest natural interpupillary. The idea is that those with wider spaced eyes can converge upon the view, while those with narrow spaced eyes will not have to diverge from it. It is recognized that convergence is a natural and easy action while divergence is unnatural, difficult and even painful. Therefore the solution of spacing the pictures closer together seems to be perfectly logical.

*Unfortunately this solution totally ignores many of the basic principles of stereo viewing.* Using a normal viewer with 65mm spaced lenses and a 65mm spaced slide, a person with 58mm interpupillary *does not have to diverge.*

The whole basis of stereo re-creation assumes the reproduction of all normal factors. Therefore for the individual who has normal vision (normality does not imply a 65mm interpupillary) the viewer lenses should be fixed in position, focused for infinity and spaced 65mm.

Focusing is provided primarily because of the variation in slide mounts and thicknesses. It only incidentally permits those with defective vision to accommodate their specific refraction (although viewers are still made which have provision for adding lenses made to individual prescription).

*Focusing should never be used to compromise between the accommodation and convergence demands.* Interpupillary adjustment is provided *primarily* to compensate for differences in the slide spacing. It is not needed to compensate for the variations in individual interpupillaries.

### Collimation

The reason for all of this is the fact that the lens of the stereo viewer acts as a collimator when the viewer is correctly adjusted. The emergent beam is composed of parallel rays, and the two beams also are parallel. Under these conditions every individual whose pupils lie behind any part of the viewer lens will use parallel vision for distant objects and will have to converge only to the normal degree when looking at closeup objects.

The Brewster (or Holmes if you prefer) viewer illustrates this to perfection. The lens centers are separated by a much greater distance than even the widest interpupillary, and many people still find the Brewster the most comfortable of all viewers. The fact that you look through the inside portions of the lenses, if anything, makes viewing easier!

Note this! In the Brewster, the centers of the pictures are placed opposite the centers of the lenses; and the distance is as high as 90mm in some instances. The important factor is that the spacing of the lenses and of the pictures is maintained, the interpupillary of the spectator is a factor of no importance, all see the picture equally well.

### Excessive Convergence

We are a cross-eyed nation! The normal rest position of the eyes is that of parallel or distance vision; yet the great majority of modern, civilized people actually have their eyes more or less converged when at rest! Far more people than is generally known have developed this tendency to the point of incipient squint and many opthalmologists include a prescription in lenses to combat it.

One of the great values of stereo is that it enables the indoor worker to give his eyes that normal, parallel, distance vision which he misses in his daily work. Potentially this factor is one which could conserve the efficiency of our national eyesight, but if we go to a narrow spaced stereo mount we shall lose that advantage and substitute still another force which is driving toward squint!

This is what happens. When the narrow mount is placed in the standard viewer, the central rays are divergent as are the collimated beams. This, instead of making for

easy vision for those with narrow interpupillary distance, simply causes *all* users to converge even when viewing distance objects. When viewing closeup objects the degree of convergence becomes excessive. There are two factors involved which should be given careful consideration.*

1) When the slide spacing is less than that of the viewer lenses, all vision is convergent.

2) Under such conditions the degree of convergence is the same for all individuals regardless of their interpupillary.

(It is naturally assumed that the viewer is in correct adjustment as far as focus is concerned.)

Again, let us see just what the convergence amounts to. In the normal slide, it is usually assumed that the greatest degree of convergence permissible is that necessary to produce vision equal to three feet, which is about four prism diopters. To be liberal we shall assume the maximum convergence to be that of an object photographed at 15 inches from the camera. This amounts to some nine prism diopters. In the usual slide, nine diopters means roughly 3mm displacement of the image. This is regarded as impossibly great by all stereo technicians; in fact it is just three times the greatest maximum ever regarded as permissible. Now let us see what happens when the mount spacing is reduced to 56mm as has been advocated. This is 9mm less than standard. Each image is displaced by half this amount or 4.5mm. *This is equivalent to a deviation of thirteen and one-half prism diopters.* Please note that we are not speaking of the *differential* deviation, which has an accepted maximum value of two prism diopters, but of total deviation of the slide image as a whole.

More generally speaking, when you look at a distant object in a slide mounted in a 56mm mount, your eyes are in about the position they would occupy when reading a page of a book held at some ten inches. When you look at a closeup object, the equivalent distance becomes about eight or nine!

Do you enjoy reading with the page within ten inches of your eyes? Most people prefer 16, or 18 or even 20!

The argument has been advanced that the close coupled slide is more comfortable to view. Of course it is for many people, especially city dwellers. People who spend their lives looking at relatively nearby objects find it a strain to get out in the open and look at objects miles away. The "strain," however, is simply that of eyes being used for normal purposes. There is no greater value in stereo than that it does provide this normal, parallel, distance vision, even if it is not too comfortable at first.

** When the beams emerging from the viewer diverge toward the eyes, the eyes must converge to accept those beams, and vice versa.*

### *Interocular Adjustment*

Now just what does the interocular adjustment provide? The viewer (once more assuming matched slide and viewer) emits parallel beams. Therefore the image can be seen equally well regardless of the portion of the lens through which the eye looks.

a) This premise assumes near perfect refraction. Therefore it is of extreme importance that the lenses be achromatic; that they be perfectly centered and that they be perfectly matched in focal length.

b) The lens diameter should be great enough that all normal variations of interpupillary will fall within the inner two-thirds of the lens diameter. If we assume a possible 20mm difference, this means a 10mm variation in each eye. Therefore the lenses should have a minimum diameter of 15 mm. In practice, because of the failing correction of lenses toward the edges, experience has shown that the ideal viewer has an achromatic lens of at least 35mm diameter.

A viewer with such a lens and fixed interpupillary is infinitely superior to one with small chromatic lenses, *with* the interpupillary.

### *Basic Relationships*

In the correct viewer-slide relationship, the two emergent beams (and the rays forming the beams) are parallel. This means then, that when any object at infinity is viewed, although the beams may lie obliquely to the slide surface, *they remain parallel* because both incline to the same side and to the same degree.

However, when a nearby object is viewed, the images of these objects are nearer, and hence lines of vision necessarily converge. In the ideal slide the degree of such convergence exactly duplicates that of normal direct vision.

If the slidespacing is greater than that of the lenses, the two beams converge in leaving the viewer which means that the eyes must *diverge*. For this reason, *no viewer should be provided with an interpupillary adjustment which permits the lenses to be closer spaced than the slide spacing.* In view of this we can understand why close coupled slides, although objectionable, are preferable to wide-spaced ones, and the habit of setting the interpupillary adjustment for close set eyes at less than the slide spacing is wrong. When that is done, the close coupled slide will of course provide great relief simply because the combination of matched close coupled slide and close coupled viewer returns the viewer to the identical optical conditions found in the normally spaced slide and viewer.

As long as the slide spacing and the viewer lens spacing remains the same, normal stereo vision is enjoyed provided the

(*Continued on page 6*)

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(Continued from page 5)

spacing used is neither too great nor too small for the spectator's eye separation.

Just what happens when the viewer has its lenses set to match an interpupillary of, say 60mm. This is 5mm less than usual. The slide is mounted (usually) at 64.5mm. This simply means that the emergent beams converge 4.5mm each side, and the spectator's eyes must *diverge* to that extent. Is it any wonder that many people find the close coupled slide comfortable?

But it is not because the close coupled slide is superior, it is only because the close coupled slide more nearly matches the incorrect adjustment of the viewer for which the user alone is responsible.

### Using Close Coupled Slides

It will be seen that there is nothing inherently wrong in the close coupled slide provided the viewer lenses are set with their centers at the same separation of the slide. But consider what happens when this is done. Suppose you use a 56mm slide. The lenses then must be centered for 56mm also. Assume moreover that someone with 70mm interpupillary wishes to use the slide and viewer. His eyes are 14mm too wide apart or 7mm each. If you look through a spot in the ordinary viewer lens 7mm at one side of center, you do not get a good image. The only thing to do is to widen the lens separation which immediately introduces a highly undesirable convergence distortion.

Therefore it is obvious that the viewer is not designed to give perfect vision solely to those who have 65mm interpupillary with all others suffering. On the contrary the 65mm viewer-slide combination provides near perfect stereo vision for everyone whose interpupillary falls within the efficient scope of the lens diameter. The 65mm gauge was not chosen because it is the ideal single separation, but because by using this gauge, all individuals with normal interpupillary (say between 58 and 72mm) could enjoy near perfect results with a 22 to 25mm lens. Interpupillaries from 55 to 75 could be equally well served by 35mm lenses for instance.

### Summary

1) Because the viewer lenses collimate the beam, a single lens separation is suitable for good quality viewing by people whose interpupillaries vary by as much as two thirds of the lens diameter.

2) The significant factor is to have the lens separation matched to the slide separation, *not* to the interpupillary of the spectator.

3) Any gauge of separation could be used; 65mm is chosen because with that gauge a greater variety of interpupillaries can be served, by smaller lenses, than by any other.

4) Interpupillary adjustment should be used to match the viewer separation to the slide separation, *not* to match interpupillary to lens separation.

5) The spectator's vision does not necessarily pass through the center of the lens, although in some instances it may do so.

6) Decreasing the lens separation for a person of narrow interpupillary makes divergence necessary and so, uncomfortable.

7) If the viewer is not focused for infinity, the collimating effect ceases and inferior viewing results. However, when the spectator needs glasses for distance viewing, the focusing adjustment makes it possible to obtain a usable and sharp image without accessory lenses in the viewer.

8) Most optical diagrams are based upon the positions of axial rays, but such diagrams are misleading in this instance. The true effect of viewing the slide can only be shown by using the collimated diagram in which *any* line perpendicular to the plane of the slide will be refracted by the lens to the normal focal point of that lens even though the line does not pass through the lens center. This condition has led to more distorted reasoning than any other in the field of optics of the stereoscope.

9) It is important that a standard be established and adhered to so that *any* slide in *any* viewer will be seen under ideal conditions, namely those in which the homologous separation of infinity images shall be identical to the lens separation. For the most efficient results this separation should be between 62mm and 65mm because those limits will adapt the viewer to the greatest range of interpupillary separations while using the smallest practical lens diameter.

10) If you have occasion to use close coupled mounts, mark their separation on the interocular of your viewer and present the viewer to this index whenever using such mounts. As stated at the beginning, this factor is not one of paramount importance because most of us can converge sharply without too great discomfort. Experience will show that prolonged viewing with the close coupled slide is more tiring than with the standard, but this is again not a really vital factor.

However, other types of departure could easily introduce conditions which would deal a serious blow to stereo. For example more than half the viewers I have examined have had the lens centers of two different heights. This is decidedly uncomfortable.

One of the most serious aspects of this problem is in that of projection. Stereo projection is wholly satisfactory and hundreds of users are finding it so. At the same time there are other hundreds who have tried projection and have given it up as a failure. But they have not considered *why* the failure occurred.

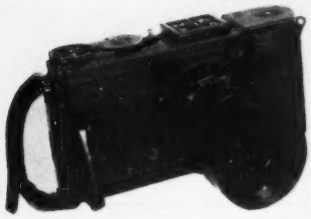
### Projection Failure

Projection is thoroughly satisfactory. The projectors which are available are good. Presumably the slides used are good. Just the same too many fail. Whose fault is it?

The fault lies wholly at the door of the operator of the projector who for some reason ignores the basic principle of stereo projection which is:

*Never, never under any circumstances, make any horizontal or vertical adjustments once the show is started and the spectators are viewing the screen!* When that rule is observed, stereo projection will be found to be 100 percent satisfactory. The failure to observe it right now threatens this popular field of stereo activity.

If you want to obtain thorough stereo enjoyment you must do just one thing: *Follow the basic rules!*



## ARMY CAMERA DEVELOPED

Recently developed by the Army Signal Corps, is a new combat camera which is impervious to rain, dust, light and fungus.

The camera, fully loaded and equipped with a four inch lens, weighs 5½ pounds, its weight having been kept down by using a magnesium body and aluminum lens mount. Combined weight of the camera and aluminum carrying case (including three lenses, four cassettes, filters, lens hood, 25 slates, cable releases, flash gun, straps and camel's hair brush) is 22 pounds. Without lens, the camera itself measures 9¼x2½x5 inches. Parts have been designed for easy maintenance; the entire chassis can be reached by removing a few screws.

The camera takes 50 2¼x2¾ inch pictures on a single roll of 70mm film. If only a few pictures are needed, as many exposures as are desired can be sliced off with a built-in knife.

Speed of operation is considered one of the camera's best points. When the shutter is clicked and an exposure made, the film automatically advances one frame and the shutter is cocked for the next picture. By shooting at 1/500, ten pictures can be made in five seconds.

The three lenses used are a four inch f/2.8 normal, a 2½ inch f/4.5 wide angle, and an f/4 eight inch lens. Series eight filters—two yellow, red, green and infrared—are used.

A combined viewfinder-rangefinder automatically adjusts for the different lenses so that the photographer sees through the finder the exact image that appears on the film. For following rapid action there is a focusing scale, a depth of field scale and a sports-type viewfinder. A double exposure prevention device and film counter are included. Finally, erasable 3x5 plastic slates for note taking are located on the back of the camera.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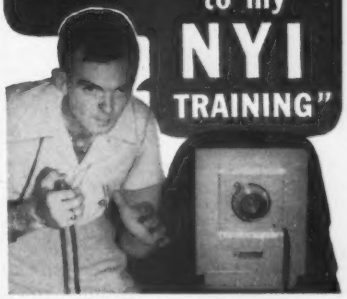

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# SPEEDLIGHT

ANDREW F. HENNINGER

**My portable speedlight has small storage batteries which have green, white and red balls floating in a side compartment. They are supposed to show the condition of the battery. How do they work?**

**A. J.—Kansas City, Mo.**

The positions of the balls in the side channel actually indicate what is taking place inside the battery. Let us assume a fully charged battery, having all the balls floating at the surface, that is placed in service in a portable speedlight. After a few flashes the green balls will sink. This is because the specific gravity, or density, of the electrolyte is decreasing as acid is being absorbed by the plates. With further usage, the white balls will start sinking. When they reach the bottom of the channel, it is a rough indication that the battery is half discharged. At this time, with continued usage, the red balls will start sinking slowly. When they rest on the bottom of the channel, it may be assumed that the batteries are completely discharged. It is desirable to put them on charge as soon as possible to avoid the sulphation which is very likely to take place if they are left for several days in a discharged condition.

During the charging cycle acid is being liberated from the plates, causing a gradual increase in the specific gravity of the electrolyte. The red balls will rise first, indicating that the batteries are half charged. When the white balls float to the surface almost a full charge is indicated.

The green balls have approximately the same specific gravity of the electrolyte when the batteries are fully charged. When they rise to the top of the channel, the charging may be discontinued. No harm will result if the batteries are permitted to remain on charge a few hours longer, but little additional energy will be stored.

**Do you advise the use of speedlight with the model F Leica?**

**C. G.—Detroit, Mich.**

Yes, speedlight may be used very successfully with Leica cameras and others employing focal plane shutters. There are limitations, of course, because it is necessary to synchronize to the lower speeds where the curtain opening is full film size. Speeds of 1/30th second and slower, on the Model F, will synchronize with speedlight.

Portraits and slowly moving subjects may be photographed indoors with speedlight, without difficulty, at the slow shutter speeds. Outdoors, factors to watch are overexposure and rapidly moving objects. Ordinarily, if the subject is moving slowly enough to be stopped by a shutter speed of 1/30th second speedlight may be used for flash fill, without producing a double image.

**The relay contacts in my flash unit frequently stick together. I have cleaned them several times with sandpaper without correcting the trouble. What now?**

**L. W.—Memphis, Tenn.**

First, make sure the relay is suitable for speedlight use. If it is not the only solution is to install one of the proper type. A relay suitable for speed-light should have large contacts of silver cadmium oxide. The contacts should close before the armature completes its closure. In a properly designed relay, this permits the contacts to slide together for about 1/30-1 inch after closing, and maintains smooth contact surfaces. A relay of this type will seldom, if ever, weld the contacts together though the unit is flashed many thousands of times, providing metal particles, dust, or other foreign material is not permitted to lodge between the contacts. Foreign material between the contacts, and this includes the oxide film that may form from long disuse, will cause heavy arcing, and possible contact welding.

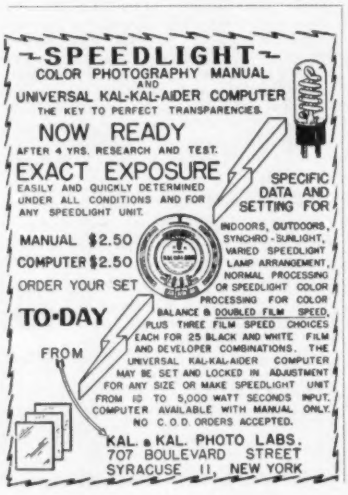
Sandpaper or emery paper should never be used for contact cleaning. Invariably, particles of abrasive will remain on the surfaces. Severe arcing and almost certain sticking will occur during the first few flashes.

A fine magneto file is best for smoothing the contacts. Finish the job with feather light strokes in order to leave the surfaces smooth and shiny. Follow up by clearing out all metal particles that might, at some future time, fall between the contacts and cause a re-occurrence of the trouble.

**How do you rate "ascor" and "photogenic" electronic flash units? Would it be possible to use these two makes of flash units and reflectors interchangeably without damage to either equipment?**

**W. L.—Montreal, Canada**

Both units are of top-notch quality, as a general rule, it is best not to attempt to use the reflectors of two makes of units interchangeably. It would probably be best to purchase, from the manufacturers, the additional lamps and reflectors to complete your lighting requirements.

**Would adding more condensers to my unit cause the flashes to be of longer duration?**

**N. V.—Philadelphia, Pa.**

Yes. For example, if the capacity were doubled, the flash duration would be twice as long. The flash duration of your present unit, and with any proposed capacity increase, can be quickly determined by multiplying the total capacity (in microfarads) by the flash tube resistance (usually 5 OHMS in high voltage, and 3 OHMS in low voltage units). If you should have 40 MFD. of capacitance in a high voltage unit, $40 \times 5 = 200$ microseconds, or .2 milliseconds, or 1/5000 second. If two self-ionizing flashtubes are connected in series with this unit, the flashtube resistance is doubled, and the time duration of the flash is also doubled; now being 1/2500 second. If two parallel connected flashtubes of the trigger type are used, the resistance is halved, as is the flash duration, which would now be 1/10,000 second.

**I use my portable speedlight exclusively for off the shoulder work. The lamp cable is much too long and gets tangled. Can it be shortened?**

**G. L.—San Diego, Calif.**

Yes, almost any speedlight or radio repairman can shorten it in a few minutes. If you do the work yourself, cut as much of the unused portion of the cable as desired from the end which is connected to the plug. Next, remove the plug cover and make notes of the wire colors and the pin numbers, to which they are connected. The wire leads of the shortened cable may now be stripped of insulation, and soldered to the proper terminals of the plug. Be sure to use rosin core solder, as acid soldering flux will cause arcing or continuous current leakage.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# CLOSE-UPS

• With this issue Carlyle F. Trevelyen, APSA, ACL, joins our staff of contributing editors. His movie column will be an AMERICAN PHOTOGRAPHY regular feature and is designed to meet the needs of both beginner and advanced amateur.

Trevelyen is especially equipped to meet these needs by the nature of his own career in the field of motion pictures, because it was as an amateur that he gained his own first experience. In 1928, with a borrowed 16mm camera he made his own first home movie. Through hard work and research he moved into the professional ranks in only two years and established his reputation as a maker of commercial shorts. He turned these out at a rate of one a year for the next fifteen years.

In June of 1928, the same year that he became a motion picture amateur, Trevelyen started his radio work with WODA, Paterson, N. J. Since then he has done a series on WGHF-FM for Peerless. He has also written, produced and acted a tv series on photography for WPTZ, Philadelphia, and has appeared on the Dumont network.

Other important facets of Trevelyen's experience are supplied by his having been a salon exhibitor, since 1936; for many years a recognized lecturer, teacher and judge (PSA, '39 and '40) on the subject of photography.

Trevelyen also brings to AMERICAN PHOTOGRAPHY an intimate knowledge of the workings of camera clubs. He has been vice president of the Metropolitan Camera Club of New York, and president of the Long Island Photographic Society, and is widely known for his interest in the important part camera clubs have played in the photographic field.

This wide and deep acquaintance with his field has supplied Trevelyen with skills in camerawork, direction, sound, scriptwriting, editing, animation and special effects. But after 24 years at this work he modestly claims only lighting and sound recording as his specialties.

For his first article, Trevelyen has elected to concentrate on sound. You'll find it on page 48, you'll find that it's called " 'Spice' Your Sound," and you'll find that his suggestions will go a long way towards helping home movies leave their too-long stay in the era of "silents" far, far behind.

You've noticed that it's true of this field as well as every other that it does not matter how much you know if you can't get it across to the people who don't. This is where Trevelyen's experience with scriptwriting comes in, because through it he has learned how to communicate what he's found out to you, so it's not necessary to do things the long way and figure out all the technical details yourself.

That's why we went and got Trevelyen—the man who has done all the work from the bottom up in just about every aspect of motion picture photography. His column is there to make things easier, better and more worthwhile for you.

• Many long-time readers of AMERICAN PHOTOGRAPHY will be pleased to see the name of Arthur Hammond on these pages. Long associated with the magazine prior to his retirement a few years ago, he is widely known and liked. "Unconventional Pictures," on page 30, is convincing proof that he remains young in ideas and outlook.

• Another name familiar to all our readers is that of Herbert C. McKay. Our Mac was signally honored at the recent PSA convention when he received the David C. White Award for his outstanding contributions to the field of stereo. A long-time expert in this, as well as in many other fields of photography, Mac's writings are closely followed by beginner and expert alike.

• We are pleased to be able to present a sample of another outstanding book by Don Nibbelink. His book, "Bigger and Better," is a nicely written description of the whole field of print-making. Try the sample beginning on page 70. We're sure you'll be ordering the book.

• William Syzdek who explains more about the use of flash out-of-doors on page 14 is no stranger to our pages, either. His "One Model is All you Need" in our March issue drew much favorable comment. We are sure this present one will also.

## 14 KODAK FELLOWSHIPS FOR CHEMICAL, PHYSICS RESEARCH

To encourage training in chemical research and to assist promising young scientists, 13 educational institutions in this country have been offered 14 fellowships by Eastman Kodak. All for advanced study, nine of the fellowships are in chemistry, two in chemical engineering and three in physics.

Five additional fellowships have been offered by Tennessee Eastman Co. for study in five educational institutions in the southeastern states. Three of the fellowships are designated for chemistry, two for chemical engineering.

Providing $1400 plus an allowance for tuition and fees, the fellowships are awarded to the colleges, which select a research student in the last year of study for his doctorate. Basis of selection is the student's demonstrated ability in his major field of study, a high degree of technical promise, soundness of character and financial needs.

Kodak established the fellowships in 1939. The 1952-53 fellowships will be awarded to the Catholic University of America, Illinois Institute of Technology, University of Illinois, Massachusetts Institute of Technology, Northwestern University, Ohio State University, Princeton University, University of Rochester, Stanford University, University of Texas, Cornell University, Harvard University and the University of Wisconsin.

The Tennessee Eastman fellowships will be awarded to the University of Tennessee, Emory University, University of North Carolina, Virginia Polytechnic Institute and the Georgia School of Technology.

## SCIENCE FILMS RELEASED

Adding to its series of educational films on nature study and science produced with John Kieran, Almanac Films, Inc. has just announced the release of 17 new subjects. The films will be available through Almanac's representatives throughout the country and directly to educational institutions.

For further information, write Almanac Films, Inc., 516 Fifth Avenue, New York 36, N. Y.


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George B. Wright

# IMAGINATION

*The British Journal of Photography* has brought up the subject of imagination several times in recent weeks. Apparently the contributors to that excellent periodical are somewhat disturbed about a certain low level of creative imagination among some sections of workers—particularly students. Such a complaint could well be echoed over here.

To all of us who have taught photography it is painfully apparent that the technical side is not difficult to put across to a beginner. In the space of a few weeks or months he can be taught enough, assuming his willingness to learn, so that he can produce a technically acceptable negative and print. With some attention to his progress, even the relatively more complicated business of placing studio lights for a desired effect can be conveyed.

But the ability to produce a printable negative, unfortunately, does not carry with it the ability to produce a picture. There are too many thousands of uninspired, trite and commonplace pictures making the rounds for there to be any doubt about that.

Learning to "see" photographically is a long and patient process. There are few teachers, comparatively, who have the necessary time to devote to aiding their students down this long road. One of the more difficult aspects of the situation is that the teacher has the problem of teaching the student to see *for himself;* not to see, necessarily, as a junior edition of his instructor. This is not an imaginary danger. Several instructors whose work we respect a great deal seem to turn out a great many small versions of themselves.

There is a difference, too, in the type of imagination which produces a picture which is different technically and one which is different because its maker saw the world in a junor edition of his instructor. This is not imaginary, either. Several instructors will probably produce pictures with a great deal of impact, pictures which will be noticed; the artistic innovator will produce pictures which have a chance of living for a long time and of influencing a great many persons.

Both types are quite valid and each photographer should have a fling at all the technical control processes. As he matures, he will then have his chance at developing his imagination to see the world clearly and surely and as a particular individual.

George B. Wright

## BOSTON CAMERA CLUB OFFERS PHOTO COURSE

Each year the Boston Camera Club offers a course in "Basic Photography" for the benefit of hobbyists in the Boston area. This year the course, given by Richard Cartwright, will cover selection of equipment, camera operation, negative development, retouching, print making by contact and enlargement, darkroom equipment, advanced enlarging control, local alteration of tonal values, print toning, print finishing and mounting.

Special emphasis will be placed on the art of finding and seeing the picture. The course will consist of six lecture demonstrations on Thursdays, October 16, 23, 30, and November 6, 13, 20 at 7:30 P.M., 351A Newbury St., Boston. Fee, $10. Please address inquiries to Robert B. Graham, 280 Washington St., Boston, Mass.

## FIRST ANNUAL EDWARDS AWARDS PRESENTED

### *Minnesota, Ohio State, Wisconsin Cop Honors*

The University Film Producers Association recently announced the first presentation in a series of annual awards for outstanding university-produced films designed to highlight the Association's efforts to improve the quality of education-sponsored films. For the present, the awards are in three categories: performance films which demonstrate a technique, information pictures and motivational films.

The University of Minnesota won this year for performance of a technique with *Weighing With the Analytical Balance*, a film for high school and college chemistry students. Script was by Harry Webb; Donald Cain was cameraman and editor; Winston Bergsman was sound recordist.

The informational award went to Ohio State's film, *Development of the Frog*, which utilizes time-lapse photography to show in a few minutes the growth of a leopold frog that actually took several days. The film, designed for freshman students, was made by Dr. John W. Price, script; Hanpo Ting, assisting on script; Professor Robert W. Wagner, production supervisor; Professor F. W. Davis, technical supervisor; Donald V. Schleich and William A. Drake, production.

Receiving the motivational film award, the University of Wisconsin's *The Face of Youth* showed aspects of a community preventive mental-health program. Production was by Herman Engl, writer and director; Martin Lobdell and William Felton, Camera; Ernest Engberg, Ben Rusy and Walter Meives, sound; Hilmar F. Luckhardt, score.

The awards have been named for the late Kenneth R. Edwards, founder of Eastman Kodak's informational films division, who was adviser on non-theatrical films for Kodak at the time of his death in 1949.

The University Film Producers Association was formed in 1947 in recognition of the need for a group which grasped the importance of the motion picture as a tool of mass communication, and at the same time possessed the actual ability to produce films.

## KODAK MOVIE NEWS

### *New Film Makes Movies in the Dark*

A new infrared-sensitive motion picture film Spectroscopic I-N Film, permits movies to be made in the dark with infrared illumination, or in the semi-dark outside, according to a recent announcement by Eastman Kodak.

The new film is described as having a very great total "red speed" and can be used in any standard 16mm or 35mm motion picture camera accepting roll film or 16mm magazines.

While the new film will not be processed by the company, recommended development is four to eight minutes in Kodak Developer D-19. Development results in a photographic negative which must be printed on another piece of film to produce a positive print for projection purposes. Spectroscopic I-N Film will be available only through Kodak industrial dealers.

### *For Better Movies and Slide Projection*

*Effective Projection of Movies, Slides and Slidefilms* is a helpful leaflet, recently revised, and which is available at no charge from the Sales Service Division, Eastman Kodak Co., Rochester 4, N. Y. The leaflet represents an extensive revision of the publication formerly offered by the company on this subject.

In addition to listing basic equipment required for a successful show, suggestions are given on extra equipment as well as the advance preparations that should be made. Data on screen picture size and desirable screen image size are included.

How to set up and check performance of all the equipment before a showing is outlined, and how to obtain the best sound quality with sound motion pictures or records is covered as well. In addition, a picture section in the back of the book illustrates projection difficulties and their remedies.

The leaflet will be a thorough going contribution to just about anyone concerned with excellence in projection.

## LINHOF GUIDE

Photographers everywhere will welcome the new *Linhof Guide* which presents for the first time a comprehensive working manual for the Linhof Supertechnika Cameras.

Seventy-five pages long, the handy pocket size booklet clearly explains in non-technical terms the circumstances and methods whereby many Linhof features may be used effectively. Detailed attention is also devoted to several subjects of specialized photography not necessarily limited to the Linhof line.

Among the general subjects covered are: Camera Movements, Tilts and Swings, Portraiture and Groups, Commercial and Macro Photography, Copying, Tele-Photography, The Stolze Focusing System and Filters. Photographs, charts, diagrams and tables are included.

The *Guide*, priced at 50 cents, is available at leading photographic stores or may be ordered from Kling Photo Supply Corp., 235 Fourth Ave., New York 3, N. Y.

## FCA AGAIN SCREENS FOR FILM FESTIVALS

Beginning in October, The Film Council of America will start screening films submitted for the 1953 Edinburgh and Venice Film Festivals held in Scotland and Italy respectively.

Each year these foreign Festivals grow in stature, and presentation at each Festival has become a distinction among film producing companies, large and small, the world over.

Entry blanks may be obtained from the Film Council of America after September 15. Deadline for all entries has been set for March 15, 1953. All films completed after March 1 will be considered for the following year.

## G.E. SPONSORS HALLOWEEN CONTEST

General Electric's Lamp Division announces a novel nationwide photoflash contest with many awards for the best Halloween photographs submitted by the competition's closing date of November 15.

Judging, to begin December 1, will be by a panel headed by Frank Scherschel, assistant picture editor for *Life* magazine.

To enter the contest an amateur need only take a Halloween picture with a G.E. flashbulb and sent in the photograph together with an entry blank and the bulb number shown on the sleeve. Entry blanks are available from local photographic stores carrying G.E. photolamps.

# SUNLIGHT IS

Text and photographs by William A. Szydek

1 2

# NOT ENOUGH

HAVE YOU EVER THOUGHT about using flash in conjunction with sunlight? By developing this technique it is possible to create many moods, and with no difficulty whatsoever freely run the whole range from high key to low. We can accent certain parts of the model—give prominence to her face, emphasize her eyes, accentuate her clothes or figure—for the best effects. By changing the lens opening depth of field can be controlled so that the background is kept soft or made sharp, dark or light, as desired.

Such effects are important not only from the point of view of general appeal; they are *musts* if a mood is to be established in a photograph.

Subject placement is a very important consideration here. In placing the subject you must decide sunlight is to act as the main, fill-in or accent light. The subject is then placed in the most flattering pose, photographer determines the mood he wants and exposes accordingly.

Figure 1 is an example of using sunlight alone with normal exposure. Notice the flatness of the model's face, a thoroughly uninteresting effect. The texture of the coat, too, has lost its detail.

In Figure 2, however, the model is in the same location, but what a different look! With the sun used as a fill-in light, one flash bulb was used as the main light. Exposure was made for flash plus sunlight, a shorter exposure than was required for Figure 1. Here the background has become a few tones darker, the coat texture has been brought out to full advantage and the face has taken on added interest.

With the sun as the main light in Figure 3, and one flash bulb as fill, a still different effect is created. In using the sun as a main light be careful to place the model's head so that the sun does not cast strong cross shadows. In this case the sun was coming from a 45° angle and in turning the subject's head it was possible to get top front lighting. Holding the flash high and to the model's left opened up the shadows, added texture detail to the coat and still kept all the modeling in the girl's face. If no shadows had been used in this shot the shadows would have been too black.

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## SUNLIGHT IS NOT ENOUGH

The model was moved to deep shade in Figure 4. Sunlight from the back barely accented her figure. A flash bulb, placed low and to the rear, achieved a cross lighting that adds life and interest to the figure. The exposure was for flash alone, which in this case produced a rich black background.

With the model in the same position, in Figure 5, the flash bulb is again low but directly in front of her. Emphasis, therefore, is placed upon her face and eyes. Again, exposure was for flash alone.

Figures 6 and 7. Sunlight was used as an accent light to add interest to the figure. One bulb held about three feet above the camera was used as fill-in.

Figures 8 and 9 are examples of background control. I wanted a white background to contain just a suggestion of the church steeple. To get this I opened my lens to its

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widest aperture to cut down depth of field. In this case I had to overexpose and under develop to insure the white background, nevertheless, a white background that had *tone*. One flash bulb was used high and slightly to the model's right.

In Figure 10 the model is still in the same location. One flash bulb was used shoulder high and about four feet away from her right shoulder. Exposure was for one flash alone to produce a low key shot with a darker sky.

All of these shots were taken between two and three o'clock on a bright sunny day. I find that the best time to take sunlight shots in the summer time are the hours before 11 A.M. and after 2 P.M. The sun is usually too high to be used as a main light between 11 and 2. However, shots taken at that time in the shade with diffused sunlight is ideal for certain effects.

Pick your subject, then, and try shooting her, using some of these relationships of sun and flash.

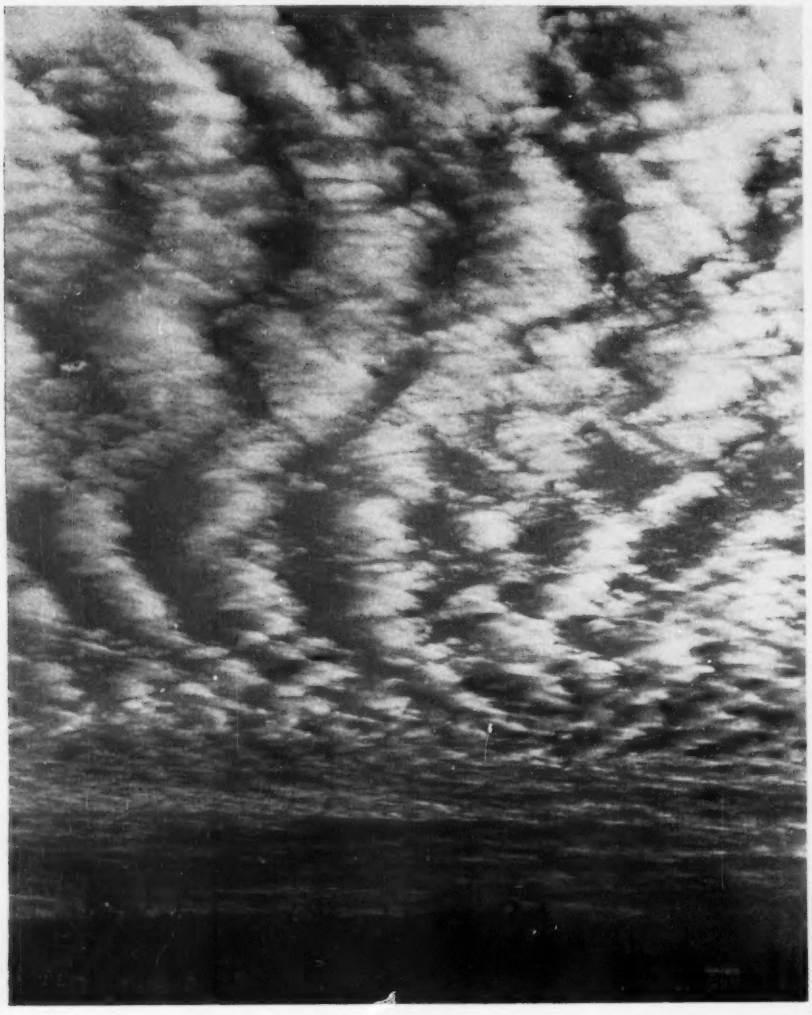
10

A dark sky sets off the crisp white of a ballerina skirt. For outdoor portraits use white clothing against a deep sky.

# THE SKY IN YOUR LANDSCAPE

***Text and photographs by Hans Kaden, FPSA, FRPS***

"LOOK AT THE CLOUDS," my companion on a picture hunting trip exclaimed one day, and, he continued, "photography has taught me one thing, that is to see the sky and clouds the way I never thought of. Before I got into that, I was interested in clouds only as far as rain or sunshine is concerned." This is quite true with everyone who enters the rather difficult field of landscape photography. Part of man's world, the sky may express



Dramatic cloud formations are often found in evening skies.

in clouds all possible emotions from idyllic peace to drama and tragedy. Is it then a wonder that the modern landscape photographer gives the sky most serious consideration, often using an unusual cloud formation as a picture theme itself?

As you in your own outdoor work will soon become conscious of those fleeting expressions, so also you will learn that many cloud formations do not seem to fit in with a landscape, seascape or snowscape. They may be too weak or too overpowering, too muddy or too contrasty, or they may be annoyingly scattered all over the sky. Or, and this is the most common experience, the contrast between sky and the landscape may be so extreme that an otherwise interesting sky would print only almost white and washed out.

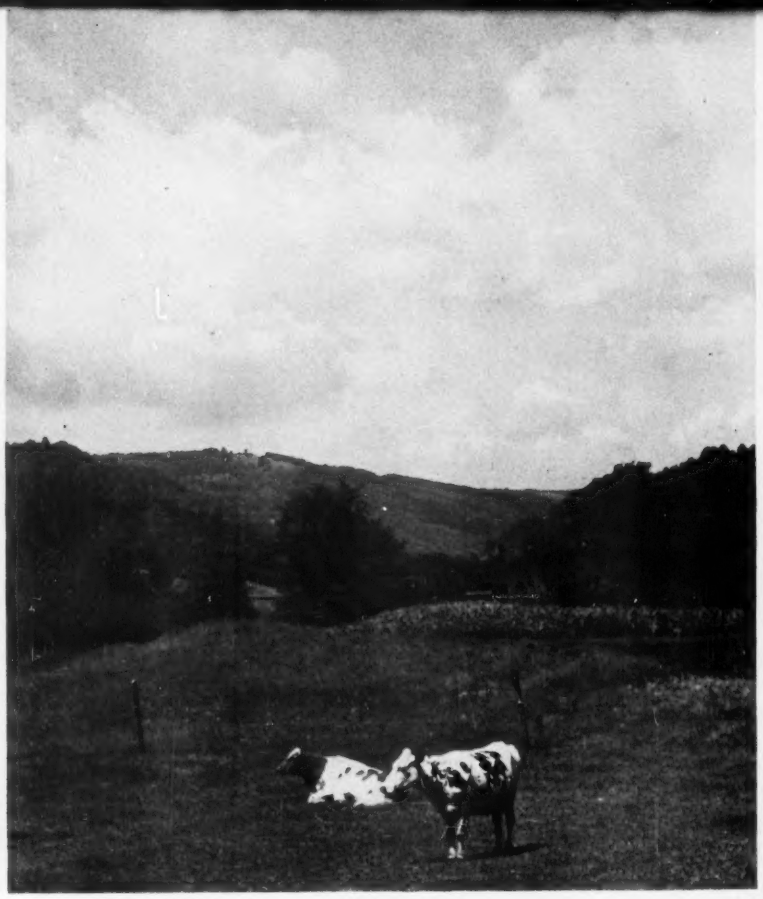
Blue sky and clouds reflect a tremendous amount of blue light to which all emulsions are mainly sensitive. Even a yellow filter to hold back the blue rays will not often help to overcome the contrast and actually will become ineffective if clouds and the sky are grayish. An orange or red filter sometimes helps, but there is the danger of *over*correcting the sky. The blue sky would print almost black against unnatural white clouds, making an unpleasing overcorrection. This will kill one of the

Featherlike cirrus clouds of evening have startling, dramatic effect, too.

Below: look for simple, repetitious cloud formations; use medium yellow or red filter, and expose for the sky.

most desirable effects in a landscape, the atmospheric perspective, by moving the distance forward.

The accompanying beach scene, *Vacation* is an example of overcorrection. It is an interesting setting but it lacks "atmosphere." The water in the foreground is of the same tone as the ocean at the horizon, thus making the ocean look like a stone wall. Since the horizon is about eight miles out it should be lighter than the water in the foreground. The use of an orange filter was responsible for this. While in a beach scene the tone values of sky, sand and water are relatively easy to control because the tones are pretty close together, it is often almost



*Vermont Hills.* The sky is too light and requires control in printing to bring foreground into tonal harmony with it.



impossible in a landscape with a foreground of dark greens.

Modern panchromatic emulsions are least sensitive to green which means that green woods and meadows would come out fairly dark. This is not the way we see it. Using an orthochromatic emulsion will give more gradations in the greens but at the same time, because of the higher blue sensitivity, the sky will print still lighter. Here is a real sky problem. It is greatest during the middle of the day at the highest stand of the sun. *Vermont Hills* clearly shows the difficulties.

Study of tone values of clouds is essential. Too much contrast between clouds and blue sky can overpower a landscape. Flat tone values, on the other hand, are usually most uninteresting and should not be given too much space. Make a study of clouds in different seasons and places, winter clouds differ from summer clouds, and clouds over flat country differ from those over the ocean or mountains.

Becoming conscious of these facts, you will be amazed at the infinite variety of clouds and skies. It is not essential to know the latin names of clouds; when a formation looks good to you, if it fits your scene, shoot it anyway or the clouds will be gone. But understanding some types of clouds and knowing how they photograph will help.

Roughly speaking, we will find either low clouds hanging at about 2000-3000 feet, or those very high up. Low hanging rain clouds, snow clouds and storm clouds are usually muddy gray. This does not add to the scene when the sky is overcast. The sun breaking through, however, may bring them to life. Watch these clouds before and after a storm. They usually travel fast and often are brilliantly edge-lighted by the sun. Here you have to shoot fast to capture unusual effects by quick action. Make the dramatic cloud the theme and, of course, keep your foreground simple. With low foreground objects the camera viewpoint must be close to the ground. If there is no low foreground, look for some elevation or shoot

from the upper floor of a building to get a free view.

Although cumulus clouds, brilliant white against the blue sky, are most interesting pictorially, they often lack a simple pattern. Their tone values away from the sun tend to merge easily with a grayish blue sky. In many cases, however, they add to the mood in a landscape. When they fill the whole sky they become overpowering and uninteresting.

The most beautiful patterns are found in the very high cloud formations, three to five miles up. These are the cirrus clouds. In the early morning and just before sunset they show all the glory clouds can give us. These are delicate slow moving small clouds which sometimes form the numerous white dots of the mackerel sky, at other times, a number of fleecy featherlike streaks.

When you decide on a picture hunting trip in the country, take a look at the sky first, or contact the weather bureau. The weather man can pretty well tell you what the sky will look like during the day, whether the ceiling will be high or low, or whether or not the sky will cloud in and what cloud formations are to be expected. On a so called "perfect day," with blue sky and no clouds, you cannot expect to find a dramatic scene emphasized by the sky. Landscapes without clouds are quite dull. On such a day, rather than looking for a landscape keep your eyes on the ground for a "foreground" picture, a so called nature still life which will eliminate the sky or give it only about one fifth of the picture space.

With strong cloud formations it is wise to avoid the competition between sky and landscape that creates "di-

This Vermont sky is washed-out, too. The contrast between dark green woods, meadows and sky is most difficult to control.

Tone values of both sky and water are close together in ocean scenes.



vided interest." If you feel that your foreground scene is strong enough to stand on its own, avoid overpowering cloud formations. Give the sky only one third or less of the picture area. Or, let the sky take over, giving it most of the space.

Often too little attention is paid to a pleasing cloud arrangement. The most dramatic effects will be achieved by simple repetitious cloud formations, brilliantly contrasted against a blue sky and strongly side- or backlighted.

A rural scene, fields in the foreground and a farm house in the distance, is a very peaceful setting. Here, however, tonal values are few in most cases. A dramatic sky will give the desirable contrast, a dull sky would make it look uninteresting and flat.

The skyline of a city is an excellent foreground when silhouetted against a sky with powerful cloud formations, storm clouds or a sunset. City scenes, on the other hand, do not need clouds. The blue sky, perferably darkened by a deep orange or a light red filter will make the buildings stand out in a strong three dimensional light and shade effect.

A single unusual weather beaten tree in the immediate foreground and a low foreground is an excellent framing for dramatic cloud effects. Birch trees, as found in photogenic Vermont, are most successfully photographed against a deep blue sky.

In seascapes strong cloud formations, rarely found over the ocean, may become distracting if the foreground matter is of contrasting tonal values. Subjects like white sails, surf and breakers call for a harmonious subdued sky. Sunsets over the bay, on the other hand, are often dramatized by the usually strong clouds.

In taking snow pictures many workers are confused about whether the sky is needed and if strong clouds would help, and they often make the wrong decision. A snow scene is definitely a foreground picture; it is the delicate texture and tonal gradation of sunlit snow which makes such a scene beautiful. But nothing is *whiter* than sunlit snow. We can express this brightness only by sub-

Above, left: if no filter is used, a light building easily merges with the sky. Right: a medium yellow filter, however, gives a better separation of building and sky. Below: with a red filter, the blue sky becomes dramatically darkened.

duing the sky. If the sky is too bright, keep it out of the picture entirely.

A few words about the use of filters. Most of the time a medium yellow filter for color correction is sufficient. It is all you need unless you wish to dramatize a city scene by darkening the sky with the help of an orange or, better yet, a red filter. This gives a strong dramatic effect, avoiding muddy tone values, and picturing white tall buildings in a strong three-dimensional way against a dark sky.

In landscapes the use of a strong filter will give overcorrection of the sky, a red filter should be used only when such an overcorrection is desired. In outdoor portraits overcorrection is sometimes helpful in separating the tones of a white dress, white bathing suit or a ballerina skirt from the sky.

But *think* before you slip your filter on the lens. The medium yellow filter, a color correcting filter, will correct only where and when color is present. In the case of the sky, we must have its blue somewhere. If the sky is

covered with grayish-pinkish clouds and the blue is grayish too, the filter will be ineffective. In the early morning and the late afternoon the more reddish light of the sun works as a filter, increasing color contrast with panchromatic emulsions. No filter is needed then, unless overcorrection is desired.

Considerable overexposure must be avoided when filters are being used or the filtering effect will be washed out.

In using the sky and making it a major part of the picture, especially in a landscape with dark foreground subjects, it is often almost impossible to overcome the extreme contrast between foreground and the sky, or in some other scenes the clouds are unattractive, or muddy, or they do not fit the scene. It will then be necessary to "control" the sky in making the print, printing-in the sky, or removing the original sky and replacing it with one from your sky negative file, or just printing-in clouds over a bald sky. We can pursue this fascinating control work in a subsequent article.

If the sky is not favorable keep your camera closer to the ground—look for the "nature still-lifes."

# EASEL FACILITATES COPY WORK

**Text and illustrations**

**by E. R. Augustin, Jr.**

Top: the easel is swung down for easy insertion of the material to be copied. Above: The easel is shown in position before the camera.

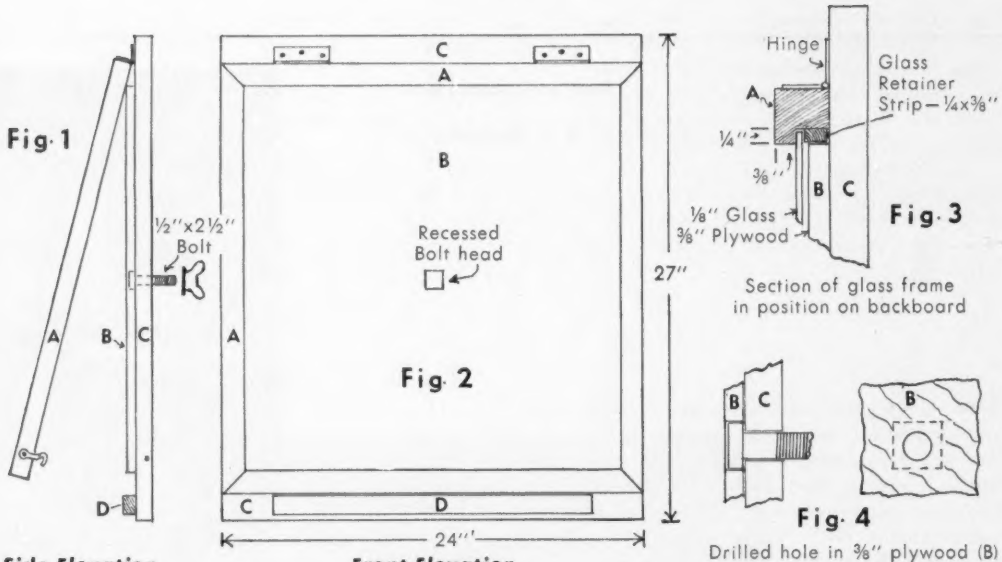
A GOOD STURDY EASEL for holding subject matter to be copied with a camera is an important part of any horizontal copying set-up. Large printing frames, attached to a wall or other support, are often used for holding copy subjects and are satisfactory where only an occasional copy is made. Where more of this work is done an easel of the type shown here offers obvious advantages of convenience and efficiency.

The homemade easel shown in the accompanying photos was put together rather hurriedly to supplement other equipment in a war-time photographic department. The accompanying diagrams show the construction details of the easel, with the additions of better bracing of the base and upper framework for greater rigidity, and provision for rotating the panel which carries the framed glass. The rotating panel makes it easy to line up the subject on the camera ground glass so that image and negative edges will be parallel.

Dimensions shown in the diagrams are for an easel which will hold an "original" of just under 22x22 inches, but these dimensions can easily be changed for a smaller or larger easel according to individual requirements. Starting with a glass frame of the desired size, the other parts of the easel should be proportioned to suit this frame. For smaller sizes than that shown, ¾-inch lumber should be adequate for making the base and the upper tilting frame.

The glass frame is the only part of the unit which will require some skill and more than ordinary household tools to build. The frame must be rabbeted to receive the glass and the mitered joints should be well fitted and strongly fastened with a good glue and substantial brads. If one is not equipped to do this it will pay to have a frame made by a local cabinet shop. Or it might be possible to pick up a second-hand printing frame (it doesn't have to be square) that can be adapted to the easel. The frame shown in the photos is of 1x1 inch oak; if softwood is substituted, the frame should be made 1½ or 2 inches wide. The glass, which should be free from scratches and blemishes, is held in place with ¼x⅜ inch

**Copy Easel—Hinged Glass Frame & Backboard**




**Parts**
**A—1"x1" hardwood glass frame**
**B—⅜" plywood—22"x22"**
**C—¾" plywood—24"x27"**
**D—¾"x1"x18" frame support strip**

## EASEL FACILITATES COPY WORK

strips fastened inside the frame with small brads as shown in Figure 3.

The next piece to prepare is the ¾ inch plywood backboard to which the glass frame will be hinged. Make this board the same width as the glass frame, and enough longer to accommodate the hinges at the top and frame support strip (D in Figures 1 and 2) at the bottom. Now lay the glass frame on the backboard, centering it between top and bottom, and carefully mark its position. Next cut a piece of ⅜ inch plywood to fit under the glass frame with sufficient clearance to permit opening and closing the frame easily. This will be approximately the inside dimensions of the *front* of the glass frame. The piece is shown as "B" in the various figures, and the work to be copied is held between it and the glass. There is a ⅛ inch space here which is decreased by laying one or two cards or blotters under the print or other subject matter so that it will be pressed against the glass when the frame is closed. For subjects on heavy mounting board some or all of the cards are removed.

The ⅜ inch plywood is now fastened to the ¾ inch backboard in the center of the area marked for the glass frame, using brads or small flathead screws. Before permanently fastening the piece drive two short brads almost home and then lay the frame in place to see that it will properly open and close. When the piece has been located and fastened, bore the hole for the pivot bolt through both pieces of plywood, locating it in the center of the glass frame area. Diagonal lines drawn from the corners of the ⅜ inch plywood will indicate the center. Size of bolt for the easel shown is ½x2½ inch; a washer and wing-nut are used for fastening. The square head of the bolt must fit into a square recess in the ⅜ inch plywood to get it out of the way and to keep the bolt from turning when the wing-nut is tightened. The round hole already bored is easily squared up with a small, sharp chisel, after the bolt has been inserted in the hole and the outline of the head marked on the plywood. See Figure 4.

The glass frame is hinged to the plywood backboard with a pair of 3 inch hinges, as shown in Figures 1, 2

**Copy Easel**

**Details of Tilting Upper Frame and Base**

Construct of 2x4 lumber except pieces E, F, G—¾" lumber

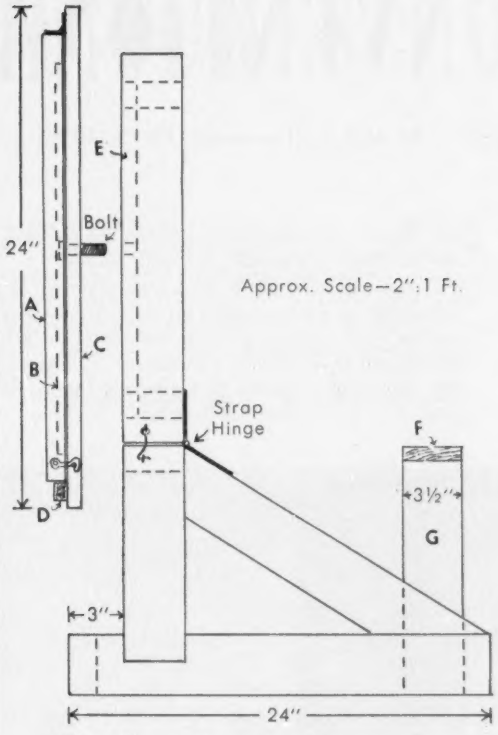



Fig. 5 - *Side Elevation*

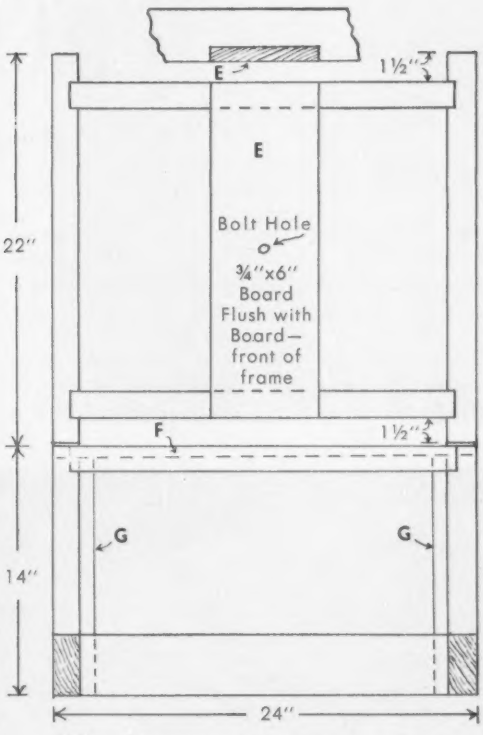



Fig. 6 - *Front Elevation*

and 3. Attach the hinges to the frame first, then to the backboard. The frame support strip, D, Figures 1 and 2, should be placed so that the frame will close when the backboard is in a horizontal position. With the ordinary loosely working hinges the frame will usually rest against the strip when upright. If tightly working hinges are used the strip can be left off. Two flat brass hooks near the lower corners of the frame secure the latter when closed. The hooks engage partially driven round-head screws in the backboard.

This completes the front panel of the easel, and the base with its hinged upper frame is now made to fit it. Figures 5 and 6 give the construction details of these parts. In building the base make the two side sections first, then join them with the four cross members: two in front as shown, and two at the back, including the ¾ inch back-rest board, "F" in the diagrams. Dressed 2x4 lumber should be used for this size easel, except the pieces E, F, G, which are ¾ inch material. Strap hinges with 3½ or 4 inch leaves should be used for joining the upper frame to the base. When the easel has been assembled a hook and eye at the joint on the side of the frame will prevent accidental knocking over, although the upper frame will have no tendency to fall backward of its own accord.

An easel of this type can be used both as a portable unit and as part of a permanent copying set-up. In the latter case a permanent stand, or 2x4 framework, is built to hold the easel at a convenient height at the end of a track having a movable camera support. Cleats on the stand will permit removing and replacing the easel without the necessity of rechecking its alignment each time it is moved.

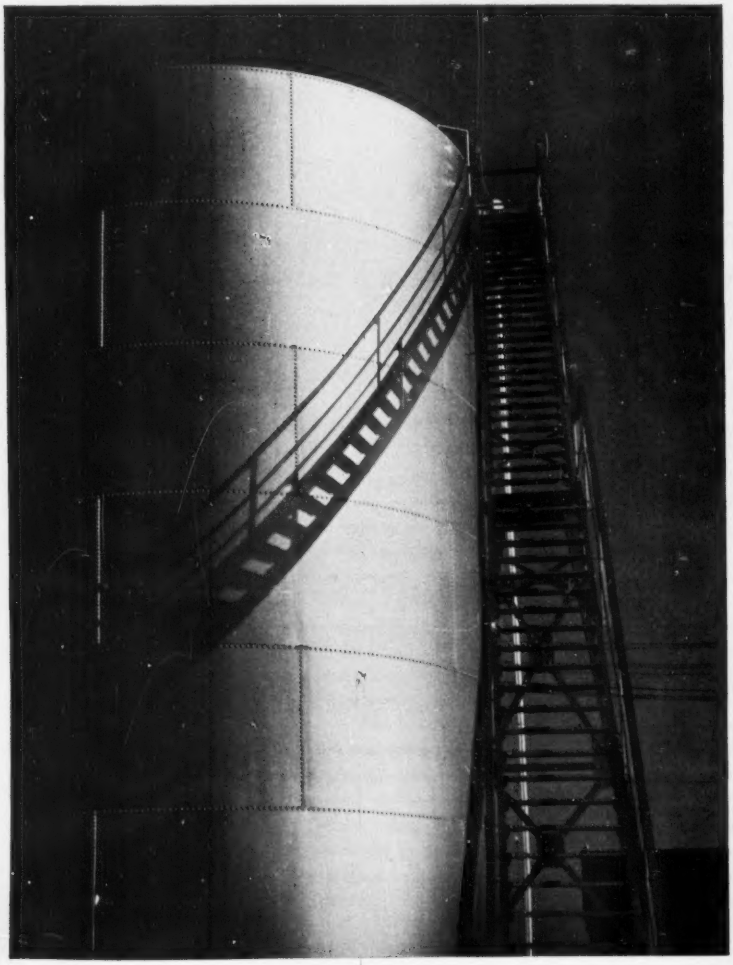
The easel pictured has served more than its original purpose. In connection with photographing commercial subjects it has been used as a low table, the front panel being laid flat, or slightly tilted, and supporting a 4x4 foot piece of plywood which made the table top. It has also been used as a support for flat reflectors—foil covered or white cards—but is a bit cumbersome for this purpose.

# UNCONVENTIONAL

**Text and photographs by Arthur Hammond, FRPS, FPSA**

"LOOK AT THOSE CRAZY PICTURES! Why should anyone want to photograph things like that?" It is a natural question because most people regard a photograph as a picture *of* something—as a factual representation of a person, an object or a scene. What the picture represents is the only thing that matters; how the subject is represented is very rarely considered to be of any importance; if the subject of the picture can be recognized, it is a good picture, no matter how inadequate the photography may be. People are usually very easily satisfied.

Though subject emphasis often helps to create interest in a picture, an artist is usually far more concerned about how the subject is presented than about what the subject may happen to be. To him a picture is "a thing beautifully photographed, rather than a beautiful thing photographed." It is possible, therefore, to make very



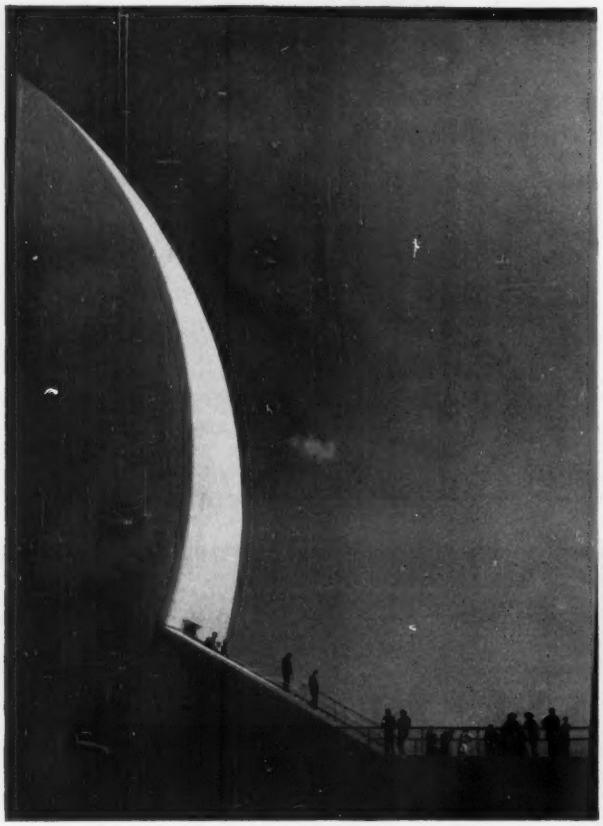
Left: *Gas Tank*

Across page: *Ragged Edge*, top; *River in Maine*, bottom.

# PICTURES

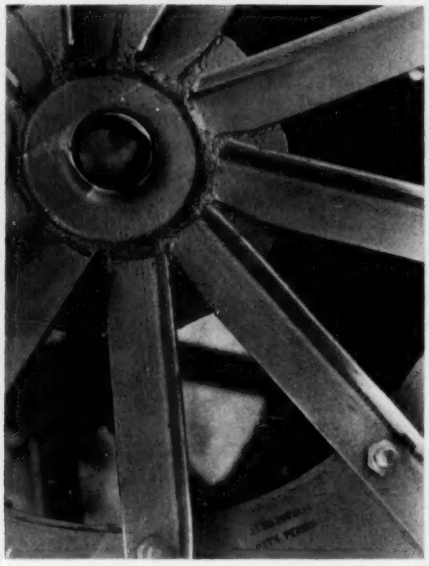
interesting and quite successful pictures of subjects that have little or no intrinsic beauty, such as a piece of driftwood cast up on the beach, some old fashioned plumbing fixtures, empty marble benches, a gasoline tank, pieces of rope and other odds and ends. Let us see if we can find a reason for photographing rather unprepossessing objects.

Photography, extant only a little more than 100 years,



*Semi-Lunar*

*Patents Pending*



*Empty Benches,* left

has acquired in that comparatively short time tremendous commercial importance and has become a very popular hobby as well. Among all the rather prosaic uses of photography, its value as a medium of fine art is apparently insignificant. There are, however, a few photographers who are artists and who like to use photography as a means of artistic expression. They use the camera to create works of art, thinking and feeling about their work very much as a painter or a sculptor does. To those people the camera is not merely an automatic machine, it is a flexible and responsive implement that can be guided and controlled.

To many people a camera is an unpredictable contrivance that is sometimes quite amenable, often annoy-

*Clutching Fingers*

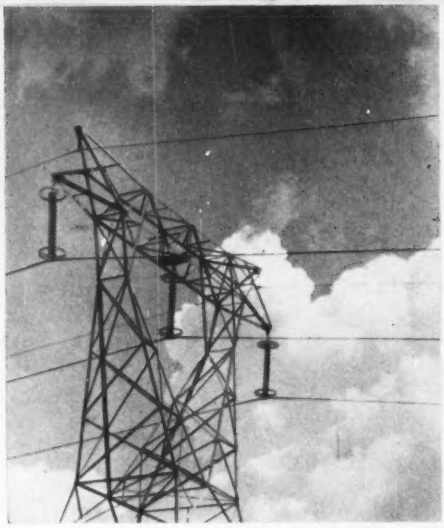
*Jazz Landscape*

ingly uncooperative. Enthusiastic camera fans who know very little about photography make some shots and then take the film to the finisher with a hope and a prayer that some of the pictures will "come out" well. The artist, however, must be an expert craftsman who not only visualizes his results beforehand, but knows just how to get them. For in the hands of an artist who is a skilled craftsman, the camera really can be controlled considerably.

Some people exercise control by more or less extensive handwork on paper negatives and by manipulating the print. Others, recognizing the potentialities as well as the limitations of photography, prefer to exploit its individual characteristics while still controlling the final results.

Every means of artistic expression has its individual characteristics and photography is no exception. It is often thought that the characteristic quality of photography is the facility with which it can render fine detail with amazing accuracy. But this is not strictly true, for the ability to reproduce fine detail is the distinguishing quality of a fine lens rather than of photography in general. A photograph can be made with an uncorrected lens, or even with no lens at all, by making an exposure through a fine needle-hole in a thin metal disc. The resulting picture may well show the characteristic virtue of photography, that is, its ability to render infinitely delicate and subtle gradations of tone.

This is where photography stands alone and this is the

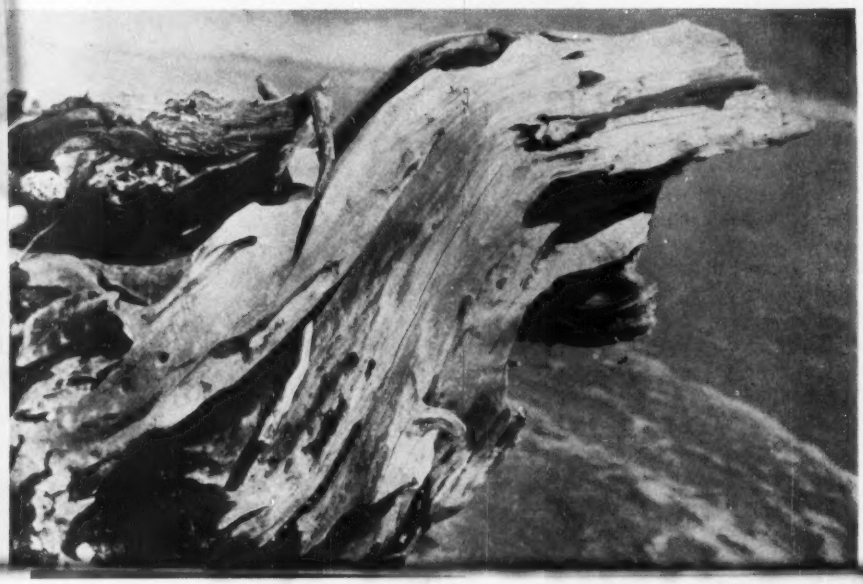


## UNCONVENTIONAL PICTURES

distinguishing quality that has given it a place among the fine arts. The rendering of tonal values and gradations is a quality that appeals to an artist because it is something that he can control. It is often necessary to modify or even to distort values for the sake of emphasis. Then too, a photographer who gets interesting and pleasing values in his pictures can take some credit for them whereas for fine detail the credit belongs to the skilled optician who made the lens. It takes a trained *artist* to see values; it takes an expert *craftsman* to get them.

To an artist who happens to use a camera to make his pictures there are other important essentials in a photograph besides the subject itself. Balance of masses, sweep of line, decorative arrangement of the lines and masses in the picture space are very important, as is, above all, the interesting and pleasing rendition of tonal values and gradations. Tones and gradations are of great importance in photography because, after all, a photograph is actually nothing but a series of light and dark tones that represent the intensity of the light that is reflected from the different parts of the objects depicted. There are no lines in a photograph as there are in a pen and ink drawing or an etching—nothing but gradations of tone.

In dealing with such subjects as are shown here the photographer can exploit some of the attributes of picture making that lend interest and beauty quite apart from the interest in the subject. He can make a well balanced pattern of masses, depict curious surface textures or perpetuate an evanescent effect of light on water. These possibilities are peculiar to photography.



Top: *Power*, left; *The Face on the Kitchen Wall*, right. Left: *Sea Monster*.

# LIGHTING FOR PORTRAITS

*Text and photographs by John Nichols*

1

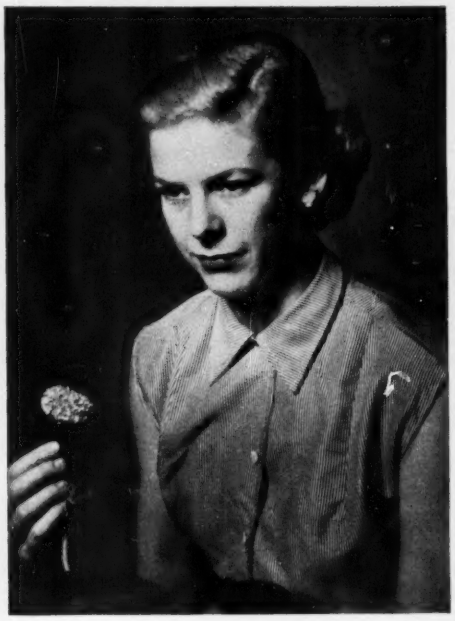
It is unhappy results like this which too often happen with indoor pictures. The lighting, posing and expression are all wrong. The author explains how to remedy this.

JOE DOAKES, budding photographer, has just met a photogenic girl. His second thought is to set up some lights and make a picture of her. Does he thumb through a book of reproductions of famous paintings or fine photographs for guidance? Does he set up his proposed lighting scheme in advance, with some substitute for the human head as subject? Does he seat himself in the subject's position, and view himself in a mirror placed where the camera is to be? Does he think about whether the subject will sweat or squint? No; though he realizes that his talents are modest, he will probably make no preparations, and will emerge from what might have been an enjoyable sitting with the girl bored and disillusioned, himself groggy from having made so many false motions and split-second decisions. The resulting pictures will reflect this lack of thought and planning. (Figure 1). And it is only this lack of thought, rather than of any nebulous artistic gifts, which rob Joe of the satisfaction of making

2

The human face is basically the same shape as the white cup used for illustration of lighting principles in the first three articles, "Learn Your Light."

3 Courtesy Metropolitan Museum of Art



4

A small light-source (one window, high up) was used by Rembrandt (1606-1669). His painting, *Lady with the Pink*, can be used as a model as on the right. For the latter, one diffused flood was used.

## LIGHTING FOR PORTRAITS

portraits of which he is proud and which his sitters appreciate.

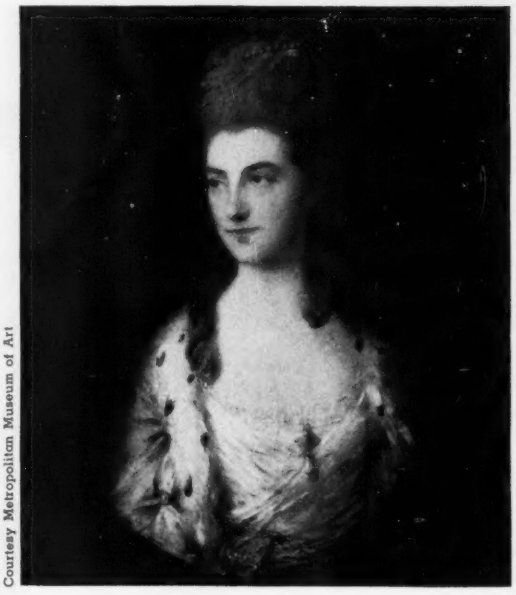
A reformed sinner makes the best evangelist, and my past performances in this field make me particularly anxious to convert those who might otherwise commit the deadly sin of a thoughtless approach to portrait lighting.

Our previous experiments with the white cup, which was the subject of Steichen's famous exercises in realism in 1913, have given us a deeper understanding of the quality of the light which is always around us and of which, in its everyday forms, we were so unobservant. In the last article I showed that all light whether natural or artificial can be analyzed and its effects reproduced. The two fundamental types are point-source and broad-source. The brightness of light and its *quality* are two completely distinct things; the effect of sunlight can be duplicated with a candle if the exposure is long enough. In studio lighting, real-life situations should be reproduced unless there is a valid aesthetic reason for not doing so.

In the first section of *Learn Your Light* it was suggested that the white cup and the human face had certain resemblances (Figure 2). Thus the results of our experiments with the cup are valid for the face.

In dealing exclusively with light, we must ignore psy-

5



Courtesy Metropolitan Museum of Art

Later painters like Sir Joshua Reynolds, used a broader light source as in this example of his work, *Mrs. Fitzhugh*.

chology, composition and other aspects of portraiture which are of equal or greater importance.

Our standards of good portrait technique were set two or three hundred years ago by Rembrandt and others. Rembrandt (1606-1669) worked in a room with a rather small (in later years, a very small) window, and got a characteristic, and widely copied, low-key effect (Figure 3). Those who have formed the habit of analysis will be able at once to imitate this effect with a high, diffused floodlight (Figure 4). Reynolds, as the most sought-after British artist of his time (1723-1792) seems to have had a much larger window in his studio, and gotten less severe, yet well-modelled, facial contours (Figures 5, 6).

With the invention of photography, we find these and other great painters imitated by the portrait photographers—when they did not merely flood their sitters with the uncontrolled light from a large skylight to cut down exposure time. Thus the painters' tradition became the photographers'.

When artificial lighting began to be exploited by the early photo-illustrators, the simplicity of lighting which was the legacy of the painters was often exchanged for a mixture of spotlight from various directions. Originally this was intended to simulate some real-life situation, as in Steichen's illustration showing a city editor's desk, 1923. In the hands of men of less taste this technique became merely an easy way of preventing "mergers" between model and background, or of insuring snappy reproduction in newspapers (Figure 7). However useful, this style of the twenties and thirties was not based on reality and is today seldom seen.

Meanwhile the professional portrait photographers clung to the great tradition. There was some tendency to use a spotlight as a main source rather than a "broad," but as this increased the amount of retouching its use was restricted to higher priced work.

Why has this tradition in portraiture proved so long-lived, that, except for costume, Figure 3 might be a photograph made yesterday? Is it because of any artistic sterility of the intervening years? No, the tradition lasted because the lightings are based on real-life situations, and because they show the planes of the face with a lifelike, third-dimensional quality. Since the aim of portraiture is to recall the image of the beloved, this third-dimensional quality has a timeless appeal and is still to be striven for.

The subject of controlled light in portraiture has four aspects: quality, balance, direction, and quantity.

*Quality of light* involves the choice of point-source or broad-source light (or a combination) and is of far greater importance than personal taste. Our backward glance showed us that the painters who established our standards represented their subjects as if lit by a window; that is, a broad-source light with a ratio of width to distance between 1:3 and 1:1. We will fail if we try to match those standards with a couple of photofloods in eight-inch reflectors, effective ratios of diameter to dis-

6

The tradition of the English portraitists was taken over by portrait photographers and modifications of such lighting treatments as this, above, have become traditional in studio portraiture. Below: the harshness and excessive accenting are typical of advertising illustrations of the 1930's, and have advantage in reproduction, but are not suited to the quieter moods of good portraiture.

7

8a

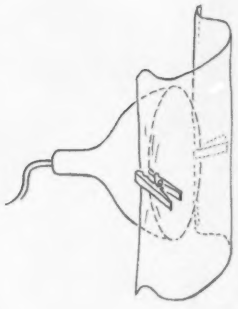
8b

The "quality" of the light also makes a very great difference. These two have been exposed and processed identically. On the left a point-source of light was used, one in which the diameter of the source and the distance from the subject form a ratio of 1:100. On the right, a broad source with a 1:1 ratio was employed. On the left, every skin pore stands out clearly. Photo, right, is sharp but more flattering.

tance of 1:18 or so. Shadows, highlights on skin, catch-lights in eyes, are quite different. Still less traditional is the use of a spotlight, ratio 1:32 or less, though the use of the point-source light at least tends to get back to the reality of the sun. But here the other technical problem intrudes. How much skin texture is desired? Unless your subject happens to have an exceptionally fine skin, the answer is—very little. Figure 8-a shows how the raw light from a point-source (spotlight, ratio 1:100) brings out skin texture strongly. Figure 8-b, made under otherwise identical conditions, shows little texture, due to the use of broad-source light (diffused floodlight, ratio 1:1). A moment's reflection will convince anyone that he would prefer a somewhat idealized likeness of his loved ones, rather than a census of pores. This goes double for a portrait of one's self. The amount of idealization desired will influence the broadness of the main light source used. The answer, for most tastes, will be a ratio of diameter to distance of the main source of between 1:10 and 1:3—much broader than commonly used by beginners. The actual procedure of broadening the source is to make a sort of bag of thin tissue around the customary reflectors, greatly increasing the luminous area. (Note: if the bag is tight the paper will scorch.) (Figure 9.)

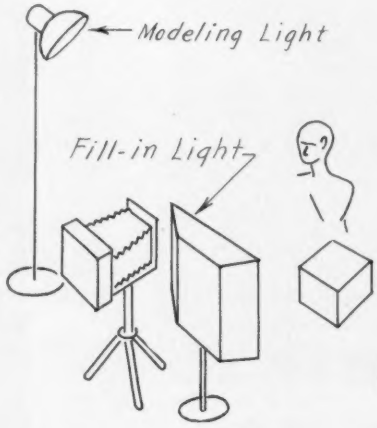
A great advantage of broad-source light is that the sitter can look into the light without discomfort. Looking-into-the-light portraits are very satisfying, and professional speedlight portraits of children are often made in this way. A Mickey-Mouse movie is projected on a screen, and at an appropriate moment a speedlight close to the screen illuminates the enraptured child. The resulting picture is notable for lack of the dull-eyed boredom so often seen in portraits.

The *balance* of light is of importance, not in any ab-



9

A source of light can be broadened by the use of a tissue paper diffuser. Do not fasten it too tightly or it will burn.




10

Conventional portrait lighting uses at least two sources, a relatively small modelling light and a broad fill-in.

11a

11b

11c

stract sense, but because it affects the appearance of the skin (by giving texture at the shadow line) and the general mood of the picture. Very unbalanced lightings have a macabre or mournful quality inappropriate to most portraiture.

Let us consider a conventional portrait lighting (Figure 10) using two lights: first, a point-source light with a ratio of diameter to distance of about one to ten, rather high on one side. This is called in portraiture the modelling light, by analogy with sculpture, and the side of the face which it strikes is always called the light side.

Second, a broad-source light very near the camera on the opposite side, with a ratio of 1:4. This is called the fill-in because of its effect on the hollows of the face.

The relative brightness of the light and shaded sides of the face determines the *balance* of the picture. Note that the light side of the face, in general, gets light from both sources; the shaded side, only from the fill-in. Were the two lights of equal brightness, the balance would be 2:1. Were the modelling light four times as bright as the fill-in, the balance would be 5:1. These values can be measured with a reflected-light exposure meter. Figure 11 shows a complete range of balances, from 100:1 to 1:2. When the fill-in is very weak, third-dimensional quality is lost and the face takes on the quality of a cutout. When both sides are *equally* bright a most boring flatness results, which requires the utmost in subject interest and composition to overcome (Figure 12). This condition is hard to get accidentally, and should not be confused with the 2:1 balance which is relatively easy to get and which, handled with technical skill, leads to the "high-key" result.

*Direction* of light is an artistic, not a technical problem; though a common-sense approach will go far toward eliminating lighting errors which cause distortion in the

11d

11e

11f

12

When the balance of the lights is too even, an undesirable flatness occurs, left.

13

## LIGHTING FOR PORTRAITS

Here are some common errors in portrait lighting. They include light too high (13), light two far to one side (14), bad ratio between modelling light and fill (14), back light too strong and spilling on face (15) and other errors. How many can you spot?

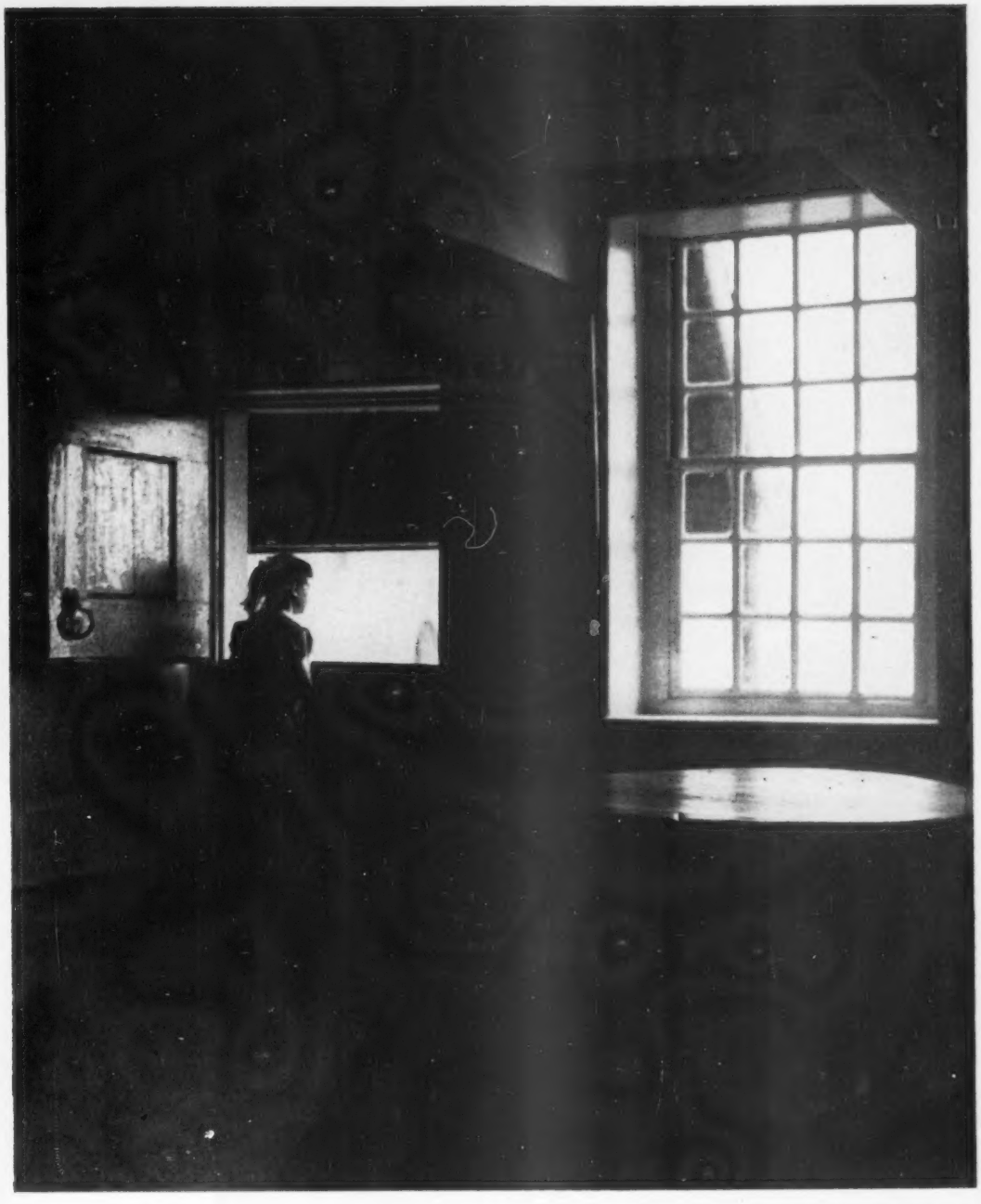
14

15

apparent shape of nose, mouth and so on (Figure 13). The most common error is having the fill-in light at a distance from the camera. Such an arrangement leaves areas of nose, eyes and chin unlit by either light, causing distortions of shape (Figure 14).

*Volume* of light in portraiture is of practical rather than technical importance. With Adamson and Hill's process (1850), full sunlight was the weakest practicable light. Modern techniques allow fine portraiture by room light. Every intensity between the two has been used, according to whether short exposures or a relaxed atmosphere was more important. The important thing to remember is that increasing the *power* of the lights, rather than their *number*, is the way to shorten exposures without introducing false shadows. The pictures you may have seen showing some famous photo-illustrator peering through a jungle of light-stands may have been faked, to show how much equipment he owns; and anyway, the timid portrait subject reacts to a roomful of equipment like a child to a dentist's chair.

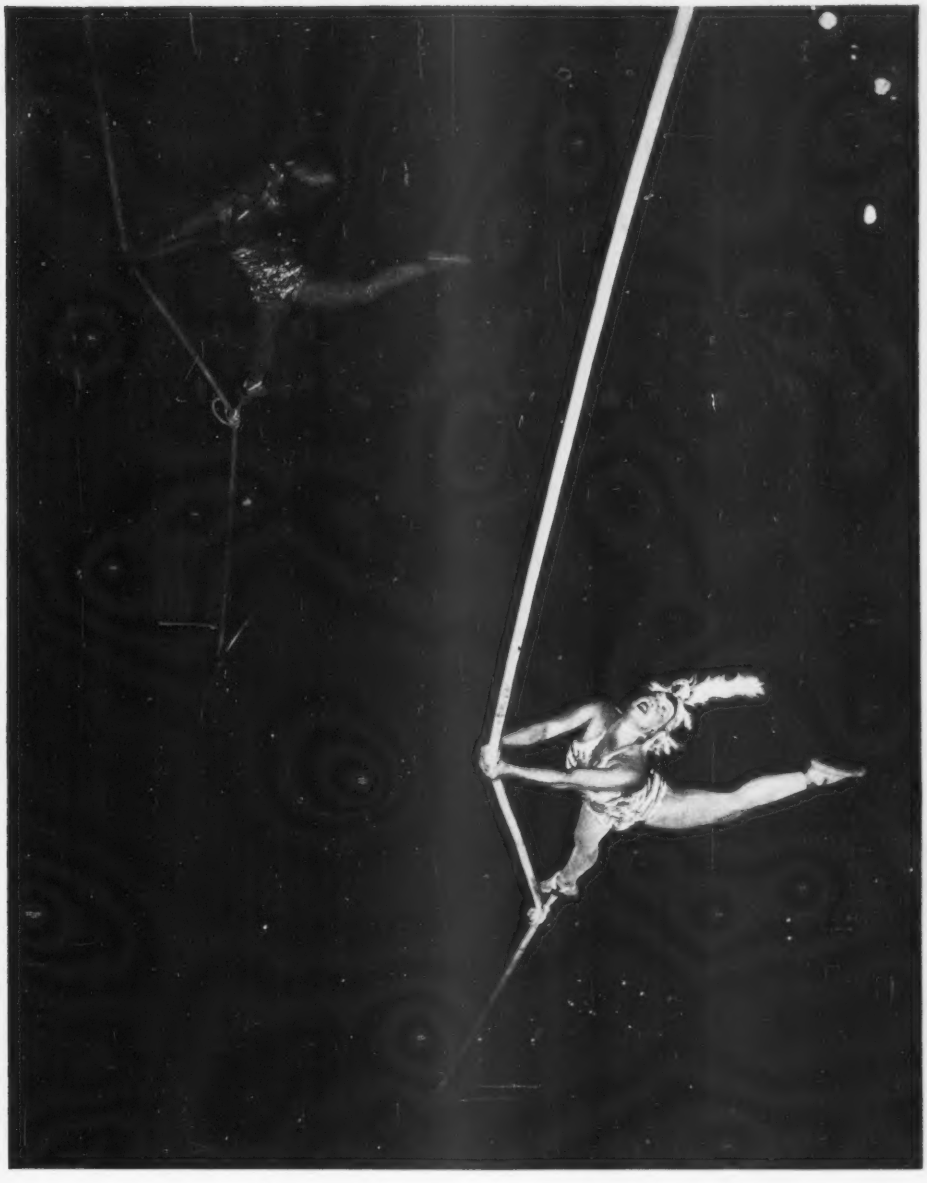
As the layman progresses further into portraiture, he will feel the need for additional accents, calling for supplementary lights or "kickers" which permit effects not obtainable with two lights. But a feeling for, and ability to get, good quality in main source and fill-in will enable you to get artistically satisfying portraits. And we who specialize in still-life must face it: granted a minimum of technical competence, the maker of a portrait which has the power of coming alive has created a greater thing than all the still-lifes that have ever been made.



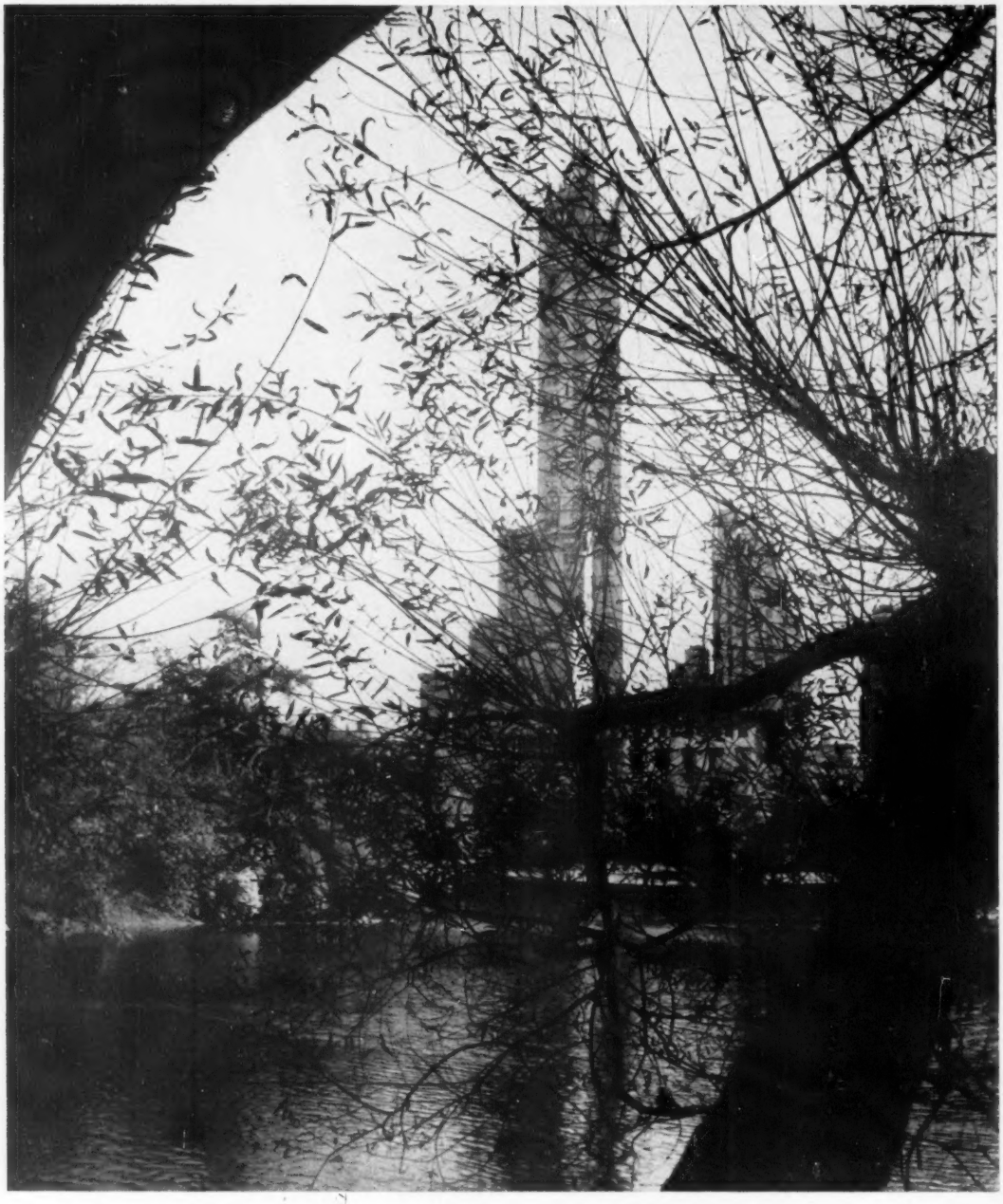
# HAROLD BLACKSTONE

## A PORTFOLIO

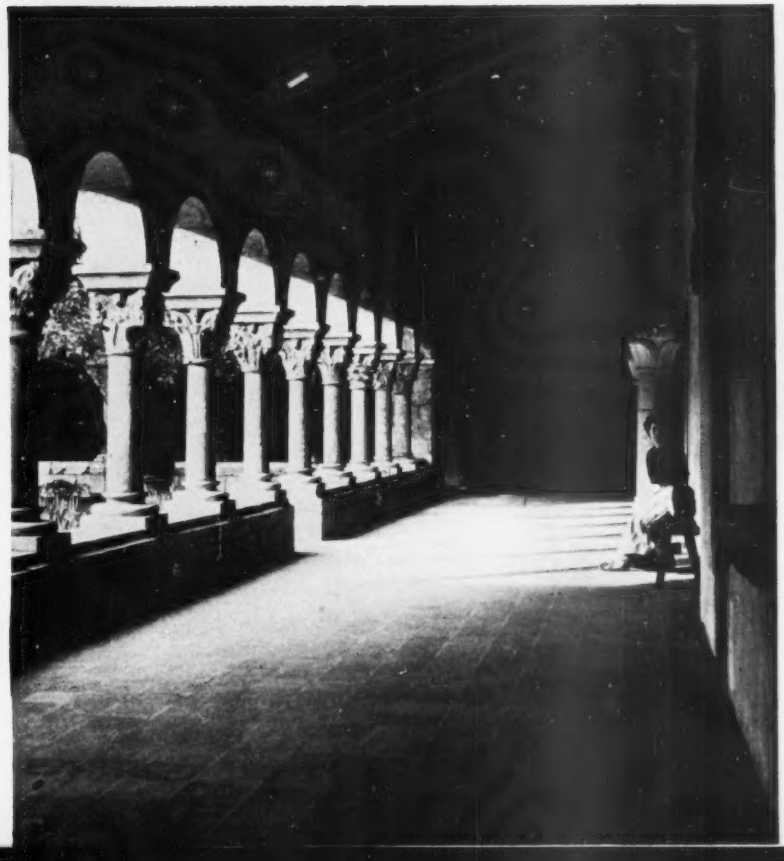
HAROLD BLACKSTONE: A PORTFOLIO



LIKE A GREAT MANY professional photographers, Harold Blackstone got into photography "by the back door." Originally a sculptor, he specialized in scientific modelling, constructing such things as biological models, relief maps and reconstruction of prehistoric animals. Photography came in as a tool for assisting in the sculpture studio but soon developed into an occupation in itself. At first, he sold pictures to rotogravure sections, to house-organs, then to magazines all over



the country. Late in 1940, a reserve officer, he was called back by the Army. For a while he was stationed near New York City and so had the opportunity of studying portrait photography with the late, and great, John Hutchins. Later during the war years he found himself Chief, Combat Intelligence Division, in the Tactical Air Force. Here he was responsible for all pub-



HAROLD BLACKSTONE: A PORTFOLIO

licity and aerial photography, and was also concerned with experimental work with new photographic equipment. After over five years in uniform, he supervised instruction at one of the country's largest photographic schools. Now free-lancing, he refuses to become specialized. While he is well-known for his dance photography, he refuses to be "typed."

Hans Kaden Photo

# "SPICE" YOUR SOUND

*by Carlyle F. Trevelyen*

MOTION PICTURE projectors employing the modern magnetic sound track system make it possible for anyone having such a projector to make sound movies with the greatest of ease.

The potentialities—subjectively, objectively and technically—of the magnetic tape method are infinite and to go into them fully would require a much more extensive discussion. Fortunately the learning and use of unit techniques will enable satisfactory progress toward the goal of the interested cameraman which is the production of professional quality sound motion pictures.

Our discussion title is more than a play upon words. "Spice" is descriptive of the quality of a well-planned and executed sound track: it describes aptly the interest, variety and audience appeal of the sound accompaniment to films.

When the first thrills of using a sound recording system, particularly one like the magnetic track that can be handled with such ease, are over, the amateur recordist begins looking for ways to incorporate this professional quality into *his* sound tracks. He finds that bare narration, no matter how well done, can become monotonous after a few reels of film have been projected. It is not denied that some specific types of films demand straight narration; it is also true that the judicious use of other kinds of sounds will improve almost any sound motion picture.

Music is usually considered the next logical sound addition, either as the main sound track, as background for narration or as a bridge between scenes and voice silences. Although, when well done, music may give smoothness and finish to a sound track, often it lacks the "spice" of variety and appeal of properly created and recorded sound effects.

When put in the right places, carefully timed and truthfully used, the inclusion of sound effects can do more for your film's audience appeal than most any other sound addition.

To be specific, let us consider the types of films that are in the majority of those produced by most amateur movie makers: vacation, travel and personal record pictures. Such films become more interesting even if only the sounds that are appropriate to traveling are incorporated. Once you have put in a few effects—a running automobile motor, the whistle of the departing ocean liner, the steam sound of the train leaving the station, the rolling surf on the beach (all of which are quite easy to create)—you'll find that other sound effects become not only desirable, but even necessary!

The following techniques include some old professional reliables still in use today. Others are original with the author. Try them out as decribed and then experiment by creating your own special ones.

*Really learn to hear a sound.* Analyze it thoroughly (preferably with closed eyes), then try various ways of reproducing it exactly as you heard it. The ultimate test of the authenticity of a recorded sound is to play it back without the visual picture and then have someone tell you what sound it is representing.

In creating sounds it is important to understand and remember three points:

1) Original sounds seldom record as one might expect them to. A few do reproduce with naturalness but for most of them various methods must be used to make the sound seem natural to the ear.

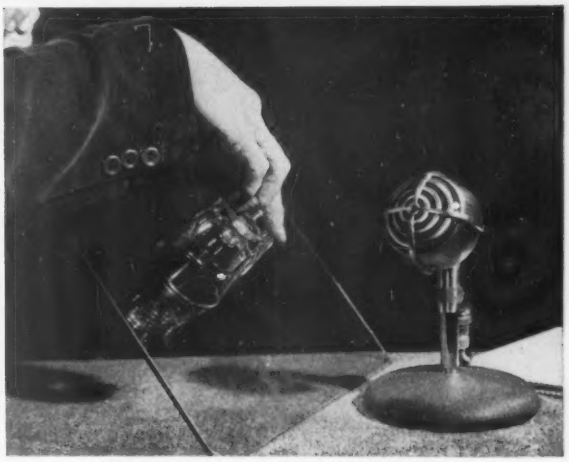
2) We hear binaurally; that is, we are "two eared" and hear in stereoscope fashion. Our microphone, however, is "one-eared" (monaural) and often translates normally accepted ear sounds quite differently.

3) Recording conditions play an important part in the naturalness of a sound effect. Some experimenting is necessary with those conditions. Varying angles and distances to the microphone, recording in a small sound-deadened space as against recording in a large "open" room and experimenting with different amounts of recording volume (gain) are the major things to consider.

Much of the fun of sound recording lies in such experimenting and it must be done if one is not going to be satisfied with less than ideal sound reproduction. Of these points the third is the most important. Now let's try creating a few sound effects.

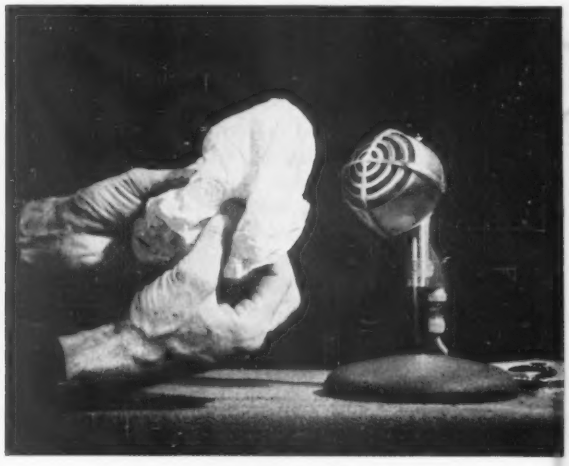
*Automobile.* The original motor seldom is satisfactory

Use an electric beater for automobiles and motor boats . . .



this technique for brake squeals . . .

an olive oil bottle for boat whistles . . .



tissue-wrapped cellophane for rain . . .

from its "sound" point of view. It "runs" better with any of these:

a) Let the blades of a slowly running electric fan strike against blotting paper or heavy paper that has been folded several times. Different weights of paper give different sounds, try several kinds to get your special effect.

b) Hold an electric vibrator against the face of a small drum, an interior wall of a room or a fairly large hassock.

c) This may get you into trouble with your wife! The effect has to be heard to be appreciated. Hold blotting paper or other weights of paper against the revolving blades of a mix master or home dough mixer. Since these have quite a number of motor speed variations many effects are possible. On the lowest speed, without using the paper against the beater-blades, one gets the sound of an automobile starter. By bringing the paper against the beater blades and slowly increasing the mixer speed a most realistic effect will be obtained.

The sound of the paper effectually drowns out the electric motor so that the supposed automobile engine sound is dominant. By varying the pressure of the paper against the beater-blades the car will recede into the distance or can roar to a stop right alongside of you.

This method is also ideal for motorboat, full size or scale model airplanes and motorcycles as well.

*Automobile Brake Squeals.* In many sound studios this is done by driving three or four nails through a small piece of wood so that their points project slightly. The

cellophane to simulate fire . . .

a rusty hinge for authentic squeaks . . .

## "SPICE" YOUR SOUND

points are then scraped over a sheet of glass. Page 49 shows another good method: by sliding, with varying pressure, a fairly thick or heavy water tumbler over a sheet of glass, quite a realistic brake squeal is produced.

*Boat whistles.* While regular musical whistles of the proper sound can be used, there is another easily made effect. Blowing across the neck of a small-mouthed bottle at a right angle to, but near, the mike does the job. Little olive oil bottles or those in which some sauces are sold are best. Putting various quantities of water in the bottle will produce different sounds. Caution: blow gently and do not blow directly into the mike.

*Rain.* Radio and tv sound men use several methods, usually specially built "rain" machines. To make good rain sound at home, loosely wrap cellophane in a sheet of tissue paper, then *very slowly* roll and squeeze it. Try different distances from the microphone, about six to eight inches usually being best. A lot depends on the sensitivity of the mike. Remember to work slowly and lightly to keep the effect natural. This sound illusion will fit perfectly into your film scene of the picnic that was interrupted by rain!

*Fire.* Campfire scenes become even more realistic when the sound of a merrily burning fire is combined with the singing of the group around it. The cellophane (at top) is crackled in front of the mike, this time without the tissue wrapping. If lightly squeezing it between your fingers does not give the exact sound you want then try to twist slowly the cellophane wrapper from a pack of cigarets. If you have scenes of a burning building or a barn, crush thin wood, such as a berry box, while the cellophane is crackled. This simulates a falling wall or crashing timbers. For a really startling fire sound chew candy mints or celery close to the mike while using the cellophane!

*Squeals and squeaks.* If you find an old rusty or squeaky hinge, don't oil it! Creaking doors and stairs, insect chirps, creaking rocking chairs, etc., can be given sound-life with it. Try various speeds of opening and closing the hinge as well as twisting the hinge sections so as to put pressure on the pin. New hinges can be "weathered" by soaking them in water and letting them "ripen" outdoors.

*Hurricanes, windstorms, lion roars.* The odd position of the microphone pictured across page produces these effects. Put the mike against either side of your throat, then very slowly and *softly* do a light gargle. Practice and experiment with the "throat" method will give you various effects. Try chewing crisp lettuce, crunching celery between your teeth or chewing the candy mints we used in the fire illusion, while holding the mike in contact with the side of your throat. But do it slowly and softly. The volume of the recorded sound is quite surprising.

Created this way, a wind or storm sound, combined with scenes of swaying trees, has a terrific effect when screened.

*Steam train, surf.* The balloon shown across page is used for these sounds. Put half a teaspoon of rice or 25 to 30 dried or split peas into a balloon, blow it up almost to its capacity and you have one of the most versatile sound effects gadgets you can make.

Shake the balloon up and down with a slightly jerky movement. There is your steam train pulling out of the station! Just a little practice is required to perfect the realistic rhythm and accelerating speed of the train. By pulling the balloon slowly away from the mike the train is sent "choo-chooing" off into the distance. Or by starting

a light gargle for hurricanes, windstorms . . .

the versatile balloon for machine shops, earthquakes . . .

the sound at some distance, then slowly bringing it close to the mike, with decelerating rhythm we get the train back into the station. When the last "choo" dies away blow very softly through pursed lips directly into the mike from about one or two inches to release the air brakes of the train.

If your scene does not show the actual engine itself or if it shows an electric or deisel powered train, the effect is still good—we just stretch the truth a little in these cases!

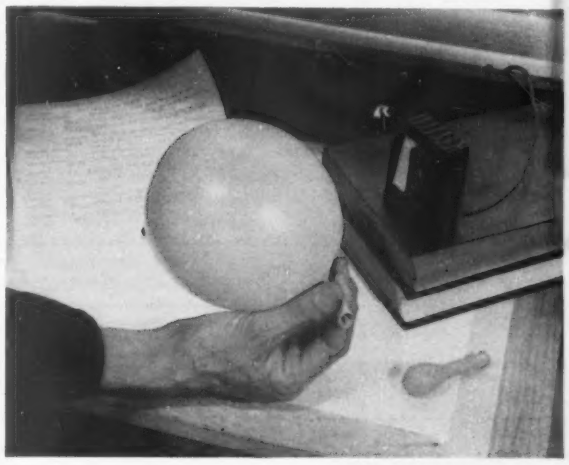
Experimenting with different materials inside the balloon as well as giving different degrees of "stretch" to it will open up many sound effect possibilities. For example, using about two dozen round or bead type tapioca grains inside a balloon blown up to approximately three fourths of its full size, will give an accurate interpretation of the rolling surf for your seaside or beach parties. Don't jerk the balloon as you did for the train; simply roll it around in whatever rhythm you want. Bring the balloon in close to the mike for the incoming surf, move it away for the surf going out. Change the speed of rolling as the surf on the film changes.

The sound of the surf beating in around rocks can be made by chewing those crisp lettuce leaves, celery or candy "hard tack!" With your mouth almost closed and close to the mike make the roll of the surf with the balloon. Do not hold the mike against the throat as in making windstorms.

Even the air in the balloon is not wasted when it is released! Find the correct distance and recording volume and let the air out of the balloon into the face of the mike. The formidable resulting roar may be taken for a windstorm, earthquake, crashing buildings, trees or a busy machine shop.

These are just a few of the hundreds of sounds it is possible to create. The methods will work with any sound recording system: tape, wire, disk or film. Once you have been able to create a good effect file it on a card, indexed under its proper heading. For special sounds or, if on occasion, there is no time for either research or experiment, you will find the addresses of professional recording companies in the telephone book. These agents can furnish commercial recordings of practically any sound in—or out—of existence, and their disks are usually reasonable.

Since most cameramen and sound recordists prefer to have their work as individual as possible, it is hoped that this discussion will contribute to their personal efforts by helping them *spice* their sound.



or trains or surf (if you put in a few grains of rice)—and you will have "spiced" your sound!

The Kodak BULLETIN

# All about 4 Great Miniatures

## *(Including the brand-new Kodak Retinette Camera)*

Here's Kodak's newest—the Retinette Camera. Look at it! It has the unmistakable Continental style, plus obviously beautiful workmanship. Heft it! It's heavy enough for steady hand-held shots, light enough to ride on a strap over your shoulder all day and make you happy to have it along.

You'll like the fact that the settings are easy to see and adjust . . . controls handily grouped. Good camera for sports coverage!

A fine Schneider Reomar *f*/4.5 Lens, a wide range of shutter speeds—from one second to one three-hundredth of a second, including delayed action—add to its picture-taking versatility. It also has accurate built-in synchronization for M and F flash lamps and electronic flash equipment.

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**Kodak Retina IIa Camera.** A top-quality precision miniature. Beautiful, too. It gives you a fast Schneider Retina Xenon *f*/2.0 Lens that doubles your color picture opportunities. It gives you fast action in color or lets you work easily in subdued light.

It gives you a film advance lever for fast action, for sequence shots, or to take advantage of fleeting picture opportunities. A flick of the thumb advances the film and positions it, re-sets the exposure counter, cocks the shutter and the synchronizer, leaves you ready for the next shot.

It gives you a combined range finder and view finder for greater picture-taking convenience.

It gives you a new 1/500 Synchro-Compur shutter, providing nine speeds from 1 to 1/500 second and with built-in flash synchronization for Class M or F lamps or for electronic flash equipment.

As rugged as they come, the Retina IIa is built of die-cast aluminum alloy with pin-grain leather covering. Closes when not in use so that cover protects lens and shutter. Takes Kodak 135 film—black-and-white or Kodachrome—20- or 36-exposure. Price, $164.10.

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**Kodak Signet 35 Camera.** Why should camera connoisseurs be so amazed at the Signet's unexcelled performance—the sharpness, brilliance, and quality it delivers? After all, that's what you expect from a Kodak Ektar *f*/3.5 *Lumenized* Lens, in a truly superb shutter, on the best focusing mount ever designed.

The amazing thing is not the Signet's top-quality performance, but its budget-low price—less than $100 for a true precision miniature!

Kodak Ektar lenses, as you well know, are unsurpassed. The Signet's Kodak Synchro 300 Shutter lives up to Ektar quality—gives you uniform release rate, a quick opening-closing rate for maximum efficiency, and reliable synchronization for all Class M lamps up to 1/300 second.

And that Signet lens mount! It rides on 50 ball bearings, for *exact* alignment and *perfect* smoothness . . . and the focusing helix is held to a lateral play of .001-inch or less!

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**Kodak Pony 135 Camera.** Here's a thrifty teammate for any beginner's photographic ambitions, and an ideal "second camera" for the expert.

You'll like the simplicity of its modern design, matched by its simplicity of operation.

You'll like the sharp, clear pictures—black-and-white or color—provided by the Kodak Anaston *f*/4.5 *Lumenized* Lens. You'll also like the Kodak Flash 200 Shutter with built-in synchronization, the body shutter release, simplified exposure settings marked in red, and automatic film stop and counter. Takes Kodak 135 Film, black-and-white or Kodachrome—20- or 36-exposure. Price, $35.75. Kodak Pony 828 Camera is similar in design; takes 8-exposure Kodak 828 Film, black-and-white, Kodachrome, and Kodacolor. Price, $31.15.

# . . . and KODAK Flash Equipment

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Here's real professional flash—for single-lamp shots, on the camera, or off . . . for multiple-lamp set-ups . . . for long extension flash work . . . for remote control . . . for trim compactness and pleasant portability . . . and, above all, for reliable response every time you press the button!

The Kodak Ektalux Flasholder is a high-energy, battery-condenser unit. One tiny battery, 22½ volts, powers one to three lamps; two batteries, tucked away in that firm "saw-grip" handle, will kick off seven lamps, spread out over 120 feet of extension cable. Batteries last over a year—thousands of flashes—and the dependable Ektalux condenser circuit assures accurate timing right up to the limit of battery life.

*The Kodak Ektalux Flasholder* works directly with any shutter that has built-in flash contacts; with Standard Bracket and 15-inch bayonet-connector cord, it is $29.75. *Kodak Ektalux Extension Units* (at left), complete with 20-foot cord, $12.40. For non-flash shutters. *Kodak Ektalux Solenoid*, $15.40, and *Kodak Ektalux Synchro-Switch*, $6.20.

## KODAK STANDARD FLASHOLDER

Here is dependable flash for any internally synchronized camera at a new low price.

**NEW** design—Sturdy plastic battery case is designed for holding; shaped to provide a secure comfortable grip, to add a note of smartness.

**NEW** bracket of the U-beam type is unusually strong and well made, tapped for either right- or left-hand use, and adaptable to any camera with a tripod socket. Rubber gripping cushion holds camera securely, prevents marring, is inlaid in bracket and riveted in place.

**NEW** mounting between flasholder and bracket permits quick and easy removal of flasholder for off-camera lighting. Support on bracket is toothed with matching teeth on flasholder screw attachment so that flasholder can be angled to match any camera or taking distance, and locked securely in place.

**NEW** rugged socket accepts lamps easily and *holds* them.

**NEW** heavy-duty ejector spring kicks out used lamps at a touch of the ejector button.

**NEW** "self-shorting" extension input . . . no need to bother with "shorting plugs."

**NEW** low price, $8.25.

Takes two standard "C" batteries or Kodak B-C Flashpack. Has exposure decal on reflector, keeping all exposure data right where it's most convenient.

**Kodak B-C Flashpack** converts the Kodak Standard Flasholder—or any flasholder which takes two standard "C" cells—to a modern, high-energy *battery-condenser* outfit. Peak energy is delivered every time throughout battery life; no gradual weakening, no lagging of ignition from weak batteries. Provides sufficient power to fire several extension units at the same time. Takes one 22½-volt battery. Complete unit with battery inserted slides into your present flasholder; no alterations needed. Price, without battery, only $2.95.

*Prices include Federal Tax where applicable and are subject to change without notice.*

**EASTMAN KODAK COMPANY,** Rochester 4, N. Y.

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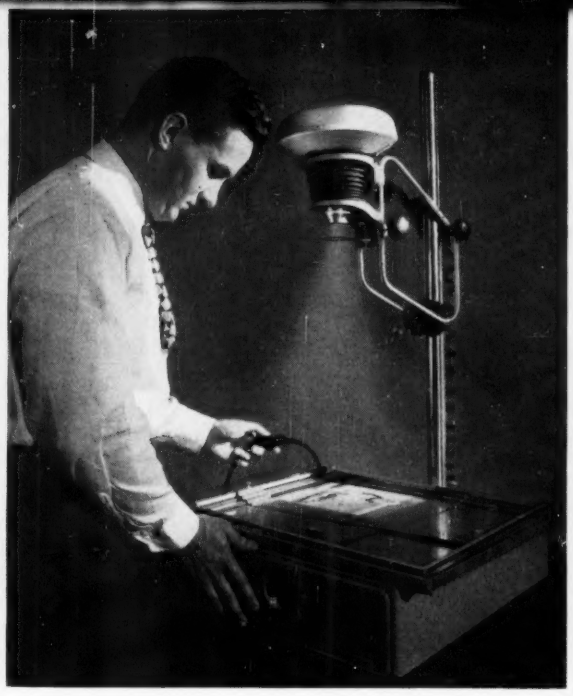
## GIVE YOUR DARKROOM A NEW LEASE ON LIFE WITH

# Kodak Darkroom Equipment



This is the season when you can really begin to enjoy your darkroom. But this season or any season, you'll heighten that enjoyment with these Kodak Darkroom Aids.

### KODAK FLUROLITE ENLARGER

First and foremost on any schedule of darkroom purchases is an enlarger, and the first-choice enlarger on anyone's list should be the Kodak Flurolite Enlarger. For this is the enlarger which, since it was introduced, has set new standards of darkroom performance. Instant starting cold light. Circline fluorescent lamp, in "integrating sphere" lamphouse, provides cool illumination of high actinic quality and excellent visual contrast—gives you easy focusing, ample printing speed, and proper printing contrast; minimizes negative grain, dust, and minor scratches, and eliminates risk of heat damage to valuable negatives.

Perspective correction, or deliberate distortion, is easy in any plane with the rotating negative carriers and tilting negative platform. High stability and freedom from vibration are assured by the extra-large, rigid steel pillar.

Ample paper storage space is provided in the light-tight all-steel cabinet base, which also provides rigid double support for the enlarger column.

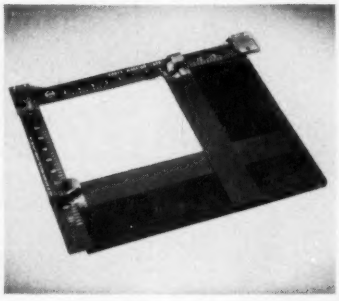
Convenience and speed of operation are enhanced by the two velvet-smooth hand controls which permit simultaneous elevation and focusing.

Versatility is provided by the long bellows draw, permitting use of lenses of various focal lengths and wide choice of negative carriers in seven sizes up to 2¼ x 3¼ inches. With accessories, enlarger also doubles as a view, copying, slide-making camera, and cine-titler.

Price, with one Kodak Glassless Negative Carrier, lamp, and 2-inch filter holder, without lens or lens board, $99.50.

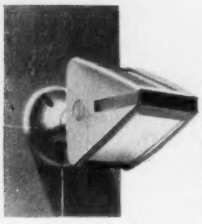
To complete your enlarger set-up you will want an enlarging lens and a masking easel. Kodak offers you a wide choice of Kodak Enlarging Ektar Lenses and Kodak Enlarging Ektanon Lenses. Matched to your enlarger and to your exact requirements, they are available in 2-inch, 3-inch, and 4-inch focal lengths, priced from $14.00 to $49.90. For the very finest work, both in color and in black-and-white, and to bring out the full capabilities of your Flurolite enlarger, you will want the Ektar lenses, the finest obtainable anywhere. Both Ektar and Ektanon lenses are *Lumenized*.

When you start working with your enlarger, you will want a Kodak Masking Easel, 11 x 14, to hold the paper in position. Actually, the Kodak Masking



Easel does far more than that. For use with any vertical enlarger, it handles papers up to 11 x 14 inches and can be adjusted for from ¼- to ¾-inch margins. Paper insertion is easy, sure, and quick because of the specially designed back guide which holds the paper down while it is positioned against the side guide. Masking arms have wide base with spring clamp handles, giving rapid, sure adjustment; they keep things completely on the square. A stand arm holds the mask off the board while paper is being inserted. Warp-proof base with non-slipping felt bottom. Price, $9.60.

The Kodak BULLETIN



Light to work by is most conveniently provided by the new Kodak Two-Way Safelight Lamp. Here is a safelight as versatile as they come. Triangular in shape, it is equipped with a filter on one side and a metal plate on the other. Both can be easily and quickly removed to change filters or to insert filters on both sides for more light. Connect it with an extension cord and set it on a table or bench handy to your work, or insert it directly in a socket in the conventional manner for wall or overhead lighting. An added advantage—the unit can be completely rotated in the socket, to aim the light exactly where you want it, in the concentration you want. Price, $4.50—complete with one filter and 15-watt lamp.


Beginner or professional, you will be interested in the new book, "Bigger and Better, the Book of Enlarging," by Don Nibbelink, FRPS, APSA. Here is an accurate, comprehensive, clear, concise, and up-to-date guide on enlarging, from simple print making to advanced control processes.

This book tells everything that goes into the final print—negatives, papers, solutions, the darkroom . . . and you. It helps you analyze your work from artistic and technical viewpoints. It gives detailed step-by-step instructions for making good pictures better. For the first time, it also describes the new control process, monochrome-dye printing. Eighteen chapters with more than 100 illustrations make this *the* complete book on enlarging. Price, $2.95.

*When planning and equipping your darkroom see your Kodak dealer.*

## MATCH PAPER AND NEGATIVE PERFECTLY

# WITH Kodak Medalist Paper

Kodak Medalist Paper is more than a fine exhibition medium. It is a new *kind* of photographic paper—a unique and winning combination of high speed, uniform speed in all contrast grades, fine tonal quality, broad adaptability to toning, and flexibility in contrast control.

Medalist's flexibility offers a new key to print quality. It enables you to match paper and negative so perfectly that print quality need never be compromised. All Medalist grades, 1 through 4, can be manipulated up or down the contrast scale to meet adjoining grades . . . giving you, in effect, an infinite series of grades.

Furthermore, merely by adjustment of the exposure-development ratio, you can choose freely between soft, normal, and brilliant prints from the same negative—without risking muddiness, fog, or shifts in image tone.

Medalist on direct development yields rich, clear, warm blacks—just a hint warmer than the true neutral blacks of Kodabromide Paper. In Kodak Brown Toner, Medalist tones to a beautiful warm brown. In Kodak Selenium Toner, it yields rich, deep browns. In Kodak Blue Toner, it acquires gray-blue tones.

Several popular surfaces—including glossy F, fine-grained lustre G, and sparkling high-lustre J—and printing grades Nos. 1 through 4.

And it's a high-speed paper, with the same effective printing speed for all four contrast grades.

In brief, it is the most remarkable photographic paper in many years. If you are seeking a finer medium for your work—if you have not yet discovered what Kodak Medalist Paper can do for you—your Kodak dealer is the man to see. See him today.

*Prices include Federal Tax where applicable and are subject to change without notice.*

**EASTMAN KODAK COMPANY**

**Rochester 4, N. Y.**

Kodak
TRADE-MARK


## *Color Movies* now easier, less expensive than ever with the . . .

# Brownie

## Movie Camera, 8mm. only $43.30

Certainly you won't want to miss movies of colorful autumn foliage . . . rustling red leaves against a bright blue sky . . . curling leaf smoke. Treasured, too, for repeated showings in later years will be those unforgettable outdoor and indoor records of the children. *It's a wonderful time of year to add movie making to your picture pleasures.*

Best of all, you can now do it for so little! A Brownie Movie Camera lists at only $43.30—and it's every ounce a real movie maker. Its precision *f*/2.7 Lumenized lens is preset so that no focusing is required. A built-in exposure guide tells you where to set the aperture for correct exposure—outdoors, dawn to dusk . . . indoors, under low-cost floodlights. Simply attach the Brownie to the Kodak Photo-Light Bar, and follow the action simultaneously with lights and camera! All you have to do is aim and shoot. The Brownie's as easy to load as the simplest snapshot camera—takes low-cost rolls of 8mm. Cine-Kodak black-and-white films ($2.90) or full-color Kodachrome Films ($3.95). Thirty to forty average-length movie scenes with each loading. And first film cost is last film cost—no additional finishing charges!

Ask your Kodak dealer to show you the Brownie—and the several other fine Kodak movie cameras. Chances are he can arrange for easy payments, if you wish.

*Prices include Federal Tax and are subject to change without notice.*

Kodak
TRADE-MARK

**EASTMAN KODAK COMPANY** · Rochester 4, N. Y.

# POP SEZ...

**Franklin I. Jordan,** FPSA, FRPS

October is the time when we run the chromatic scale in photography. Winter tends to dull and drab colors in most parts of the country while the face of nature everywhere, as well as many of the inhabitants, bursts into color in summer. But in the temperate zones there comes a couple of weeks, just before the deciduous trees shed their leaves, when color really runs riot. The desert cacti put on a big show in the spring, and there are other local bids for fame, but it is generally agreed that for a spectacular display of color northern New England in October has no close rival. It is the Mecca for thousands of cameras every year, but for those who cannot get to the main show there are lesser but still very handsome exhibits of the same nature scattered all over the country.

Nothing in the tropics approaches the splendor and universality of this northern autumnal display. It looks as if old Mother Nature, like a good merchandiser, were trying at season's end to close out all the color left over from the summer, rather than carry a big inactive inventory through the winter. She splashes it about with a lavish brush all over the landscape. Beeches and hickories become 22-carat gold. Blueberry patches take on the appearance of wonderful Oriental rugs. Maples lift their scarlet branches like gleaming oriflammes of war. Oaks are richly adorned with orange and maroon. Goldenrod and asters mass in clumps of purple and gold. And all around and in between and up above, there is just enough green and blue from unturned foliage and the sky to set off these gorgeous colors.

So there is an understandable rush to camera counter and drugstore for color film. Snap, snap, snap in every direction. Anywhere you look there is a picture, if color is all you want. This particular lure for color photography has been irresistible for over 40 years. Yes, you heard me the first time. It is well over 40 years for it was in 1908 that some of us took up the Luminiere Autochrome when it first hit the American market and have been following color ever since through a dozen different developments by other manufacturers. It has long ago lost its novelty for us, but never its thrill.

Anyone who starts in color nowadays has seen thousands of examples of it, both in the original and in cleverly printed reproductions in books and magazines. That is what impelled him to try it. But he gets the thrill of a lifetime from the first bunch of his own stuff that he finds in the mail some morning. Imagine then, if you can, what happened to us guys in 1908 when we carefully exposed a plate according to directions, rushed into the darkroom and put it through the soup and held up to the light the first direct-color transparency we had ever seen!

It is to laugh when someone nowadays querulously complains that color is expensive. By the time we got them mounted these first Autochrome plates cost us about a dollar apiece, and this at a time when the average young fellow was lucky if he got three or four dollars for a long day's labor. And we had to do all the processing ourselves. Yet at the end of my first year I think I had more money invested in color plates than in anything else in the world. That's how thrilling color was to us 40 years ago.

The speed of those plates was what you might call slow. We had no means of exact speed determination in those days, but the directions said (if you could read French) to give them 60 times as much exposure as you would an ordinary plate. Black-and-white emulsions at that time had about the same speed that color film has now, so that meant that we calculated in fractions of seconds and exposed in whole numbers. A standard exposure was one second at f8 in full summer sunlight. Snapshots were sometimes hand held at 1/5 second at f4.5. With steady nerves, a heavy camera and no wind you could once in a while get one that wasn't too fuzzy, especially if you sat down or flattened your back against a tree or a building.

Surprisingly, the color rendition of this first successful color process was not far behind the standards of today, but there were severe physical handicaps. The slides were on glass that was bulky, heavy and breakable. They had to be loaded one at a time in total darkness. The exposure was so long that it necessitated a tripod for practically every shot. The color was a mosaic screen that limited the degree of acceptable magnification, and the slides were so dense that it took something like a blowtorch to project them. It was a common occurrence to see a particularly good one that had been held too long on the screen by the plaudits of the audience, melt and run off from the glass.

Through the years the manufacturers have gradually removed or greatly reduced all these handicaps: price, bulk, weight, breakage, slowness, grain, opacity. Although some of us for most of our lives have given photographic manufacturers all the loose change that we had, we still owe them a debt of gratitude for all the burdens they have lifted off our necks.

The outstanding trouble with color now is its fatal facility. Take a meter reading, snap the shutter, mail the film and back it comes for 17 cents a shot. The result is an amazing number of worse than useless slides. Until the fever has run its course and begun to subside, we have to spend many hours in bored silence looking at meaningless masses of color that some enthusiastic beginner's lens has collected without any intelligent direction upon his part.

Perhaps what gripes us the worst about most of these slides is that literally as well as physically they make us see red. Primitive man had a special passion for red, and the average citizen of today has a primitive hangover in this respect. Nature uses red very sparingly, but with delightful effect. The reason she had so much left over for the autumnal display was that she could not use it all without upsetting her color balance. Blue, green and brown are the colors that she uses the most, picking them out here and there with a little yellow and red, often in mixture. Look around anywhere and see how much red there is except what man has dragged in to adorn his women, houses, wheelbarrows and heavier-machinery, and of late years quite a bit on his own person. But look at the reproduction of color photography in any magazine and try to find one without a preponderance of red that has been dragged in to liven up what nature provided. Because people like it.

Since this urge for red will not be denied, now is the time to indulge it. Go to it and get it out of your system. When you get fed up with red you may begin to study color harmony and find a new field opening up for you. Endless combinations of color can be made, and you can even buy a chart showing how to do it when your own imagination fails. But there is no right or wrong to it. It is all a matter of taste and the best that you can do is to cultivate your taste and refine it a little from its primitive instincts.

When you do, you will probably learn the lesson that Nature has all the while been displaying before your eyes and use red for accents rather than areas. But on the other hand perhaps your particular audience hasn't been educated up to this nicety, in which case you will have to keep on feeding them red if you want to retain your popularity. Which you may want to do.

# NOTES AND NEWS

### Lens for 16mm

*Pan Cinor*, another Paillard innovation, is a 20mm to 60mm focal length lens for 16mm cameras. Designed to enable the cameraman to follow, hold and create action in addition to special effects from one camera position, the lens provides the equivalent of a nine-lens turret without having to change lens. *Pan Cinor* has an f2.8 aperture suitable for black-and-white and color work and is ideal for fast sports. It has a standard "C" mount and coupled view finder and will fit almost any 16mm camera. Focusing range and parallax correction are from five feet to infinity, diaphragm stops down to f22, a detachable sunshade is standard equipment, all lens elements are coated. Please mention AMERICAN PHOTOGRAPHY when requesting further details from Paillard Products, Inc., 265 Madison Ave., New York 16, N. Y.

### Box Camera from Ansco

Designed by Raymond Lowey, the *Ansco Readyflash* is an inexpensive, good quality fixed-focus camera employing flash synchronization. *Readyflash* uses 620 film to give eight $2\frac{1}{4}$x$3\frac{1}{4}$ prints. Constructed mostly of metal, the camera is small, compact and has a black grained body with satin finish trim. *Readyflash* is priced at $6.30; flash unit attachment, $2.75.

### Gadget Bags

*Topical Tan*, is the name of a new line of gadget bags introduced by the Diamond Case Division of Louis Lefkowitz & Bros., Inc. Made of top-grain leather and tanned with natural oils left in, the bags are available in 13 sizes and are priced from $10.50 to $49.95. For additional information, write to the manuafcturer at New Brunswick, N. J., and please mention AMERICAN PHOTOGRAPHY.

### Speedlight Unit

American Speedlight Corp. announces the introduction of the *ASCOR Model MB-100 Speedlight*. It is especially designed for the Press Photographer, but is ideal for many other uses.

The unit is a high-powered speedlight designed with a leather carrying case, similar to the standard Press Photographer's case, and provides room for carrying the speedlight holders, battery case, etc., all in one compact unit.

The speedlight is a 100 watt-second unit with a guide number of 200 for normal development and with at least a guide number of 320 for "hot soup," or 25 per cent over-development. The case of the power supply is completely sealed, making it weatherproof. The speedlight power supply is held into the leather carrying case by means of two fasteners that can be loosened or attached with a one-half turn.

The battery is provided with spring terminals so that all that is necessary is to slide the battery into the battery compartment. It is not necessary to screw on any nuts or terminals.

The speedlight unit operates on ac or on its self-contained battery and includes a battery charger and condenser reforming circuit. Another feature is the coil cord used in the cable from the power supply to the light unit. The helical spring-like cord permits freedom of the camera without excessive amount of cable drooping around the knees.

Complete information is available by writing to American Speedlight Corp., 480 Lexington Avenue, New York, N. Y.

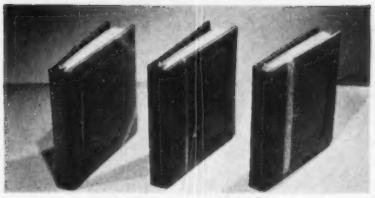
### Ultraspeed Telephoto Lens

Introduced by the Exakta Camera Co. is the 90mm f1.8 *Angenieux telephoto lens*, another in a series developed in the Paris Angenieux laboratories.

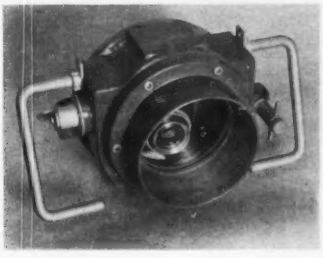
Designed for shooting in theaters, sports arenas and indoor auditoriums, this lens renders almost 2x magnification and allows the photographer to shoot under extreme lighting conditions, in color as well as in black-and-white. Resolution is excellent, it is said, and will satisfy critical photographers. Available at local camera stores at $149.50. Or, for further details, write to the Exakta Camera Co., 46 West 29th St., New York 1, N. Y. Please mention AMERICAN PHOTOGRAPHY.

### Water Powered Washer

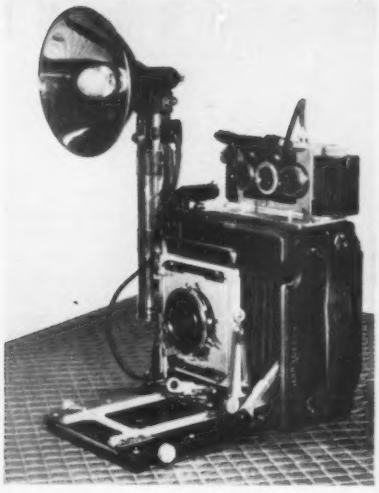
The Arkay *Loadmaster* is a water-powered washer constructed entirely of stainless steel and capable of washing single or double weight prints in all sizes up to and including 11x14. One hundred 8x10 prints can be accommodated at the same time and by constant rotation of the perforated cylinder drum, prints are thoroughly washed in a very short time. The manufacturer says that matting of prints to each other



Kodak Riviera Protecto Albums



Robot underwater camera



Press-Stereo Bracket

or to the side of the drum is entirely eliminated. Complete with hose connections, *Loadmaster* is priced at $83.95. For further details write the Arkay Corp., 1570 South First St., Milwaukee 4, Wis.

## Sub-marine Photography

A new camera has been developed in Germany, designed for underwater photography. Called the *Robot*, it works underwater automatically by means of a built-in spring motor. After every exposure, the film is advanced and shutter set by the motor which, according to its size, can make 24 to 48 exposures with one winding.

With a special electro magnetic release attached to the *Robot* the photographer may stay above water level when he wishes to photograph stationary subjects below.

For rapid sequence photography, six shots per second may be taken when released by hand, and up to eight when a series release is used.

For protection against water when submerged, the camera is equipped with an underwater case *UWI* which is manufactured in series, and which may be used as far as 100 feet beneath the water's surface. Exposure time settings as well as winding are done before the camera is fixed in the case and lowered to take pictures.

## Snapshot Albums

*Kodak Riviera Protecto Albums* have been designed for picture takers who like to keep their shots in a trim, goodlooking snapshot album. With simulated leather cover embossed in an alligator type finish with a decorative 24 carat gold band, the new albums will be available either in a choice of blue cover with gray paper leaves, brown cover with brown paper leaves or red cover with gray paper leaves.

Featured in the albums are clear plastic Kodapak folders which supply both full protection and visibility of shots. The folders, together with their paper inserts, are bound directly into the gold-plated Mult-O Ring binder which opens and closes easily with slight pressure from thumb and finger. Pictures slip inside the folders; small prints must be pasted or held in position, but large prints will automatically be held in position.

Each album, supplied with 12 folders with paper inserts will accommodate up to 24 8x10 prints or an equivalent number of smaller prints. Extra leaves and Kodapak folders are available. Available from Kodak dealers at $8.50 each.

## Press-Stereo Bracket

Enabling a photographer to shoot a picture simultaneously with both stereo and press cameras, the *Press-Stereo Bracket* eliminates the need for an additional photographer. Also, since two cameras are synchronized through the same flashgun it is necessary to use only one flashbulb.

Construction is such that the user can sight his subject through the viewfinder of the stereo camera, thus registering the identical picture on the press camera with a standard lens. Parallax is preadjusted for images from six feet to infinity. It is recommended, however, that the rangefinder of the press camera be used to determine correctly the distance and setting on the stereo which is adjusted accordingly.

The flash is synchronized by connecting the stereo to the remote control outlet of the flashgun. By firing the shutter release on the stereo camera, the press camera will automatically be fired through the solenoid to make the exposure.

The *Press-Stereo Bracket* can easily be detached from the press camera and the stereo camera can be removed from the bracket for reloading without disturbing alignment. For additional information and prices, write the Mack Camera Co., 1025 Commerce Ave., Union, N. J. Please mention AMERICAN PHOTOGRAPHY when writing.

(*Continued on page 60*)

# NOTES AND NEWS

(Continued from page 59)

### Lightweight Flashgun

Weighing approximately six ounces, *Panorma BC Flash* consists of a nearly unbreakable plastic case, highly polished five-inch reflector. The reflector permits high lumen power efficiency with a radius of 50° distribution to allow full coverage of an average subject. Easily assembled or taken apart, the flashgun fits any domestic or foreign camera having built-in flash synchronization.

A shoe on the flash unit clips on the camera or can be attached to an angle bracket. A fingertip bulb ejector prevents accidental burns. With a condenser charge firing six bulbs, the unit retails at $8.98.

### Lens Attachment

A lens attachment which eliminates retouching may be used in conjunction with any lens. Called *Pictrol*, it converts the normal lens into a variable soft focus lens to give from sharp to very soft diffusion. When attached to an enlarger *Pictrol* reduces grain and softens harsh contrasts, says the manufacturer, and enables the photographer to obtain identical prints. Diffusion is controlled by turning a calibrated ring.

Simple to attach and easy to use, the attachment is priced at $4.95. Please mention AMERICAN PHOTOGRAPHY when writing the Craftsmen's Guild, 1001 N. Orange Dr., Hollywood 38, Calif.

### Photo Paper Dispenser

Safely storing sensitized paper, *Ejector Paper Safe* is of rugged construction in an 8½x11-8½x14 combination size priced at $12.50. Also available are 5x7 and 8x10 sizes.

By pushing a lever one sheet of paper at a time is dispensed from the compact and lightproof unit, which eliminates darkroom fumbling. For further details, contact the General Photo Products Co., Inc., Chatham, N. J. Please mention AMERICAN PHOTOGRAPHY when writing.

### Tester Previews Lens Performance

Optical performance of all 8mm and 16mm movie lenses may now be checked with use of the *Wirgin Lens Tester*, the Camera Specialty Co. announces.

Operation is simple. The lens to be tested is inserted into one end of the lens tester. At the other end, the optical eyepiece shows a magnified image of the field of view which that lens covers. The viewer therefore can judge whether or not the lens meets his requirements for the scene he is shooting.

Handsomely finished in satin aluminum, the *Wirgin Lens Tester* has precision ground and polished lenses for sharp measurement. Available at local camera stores at $10.00.

### Single Lens Reflex

*Astraflex II*, a single lens reflex camera, is now being offered by Sterling-Howard of New York. The camera is equipped with 10.5cm f3.5 "T" coated Zeiss Tessar lens in helical focusing mount, depth of field scale and engraved aperture stops. Fully automatic, *Astraflex II* has built-in flash synchronization, automatic film wind, counter and shutter rest. Focal plane shutter speeds are from one second to 1/1000.

While the camera takes 12 exposures on standard 120 film, there is provision for use of cut film or plates as well. Covered in black leather, and with chrome plated parts, *Astraflex II* is priced at $179.50. For additional information write Sterling-Howard at 1900 Monterey Ave., New York 57, N. Y. Please mention AMERICAN PHOTOGRAPHY.

### Cassette for 35mm Bulk Film

Combining the trouble-free operation of factory packed film with the economy of using 35mm bulk film, the all metal *Shirley-Wellard Universal Cassette* will be welcomed by 35mm users whose cameras are equipped with a pull-out rewind knob.

After being wound on the spool the film is inserted in a rotating inner tube within the cassette and is completely protected against light. An adjusting screw, provided with the cassette, prevents the film from failing to line up with the film track and sprockets of different cameras. Feeding smoothly and without scratching until all exposures are made, the film is rewound in the conventional manner. Price, $7.50. Available at local camera stores.

### File for Color Transparencies

Made of durable cardboard covered with waterproof imitation leather paper, this *slide file* will provide neat, compact storage for color transparencies. Inexpensive but sturdy, the file has six compartments, each holding 20 cardboard slides. If there is only one slide in a compartment it cannot fall below the top edge, making slides readily accessible at all times. An index on the top for each compartment enables the photographer to keep track of his pictures efficiently and easily. Price, 50 cents, from Marlen Packages, Inc., Dept. 1, 75 Eagle St., Providence 9, R. I.

### Check Lamps

Two *Flash-Chek* lamps that provide a simple, inexpensive method for checking batteries, sockets and wiring connections in photoflash synchronizers have been announced by the Westinghouse Lamp Division. Known as *PT-1* (small size) and *PT-2* they retail at 22 and 25 cents respectively.

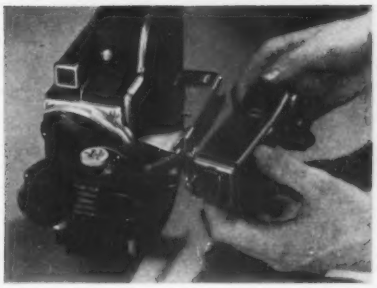
### Color, Sound and Stereo!

Paillard Products, Inc. says that home movie makers can now out-Hollywood by adding sound, color and three dimensions to family movies. All that is needed to accomplish this is a Kern-Paillard *Stereo Lens* for taking the pictures, a *Stereo Projector Lens* for projection, and Bell & Howell's *Filmosound 202* 16mm magnetic recording projector to supply sound.

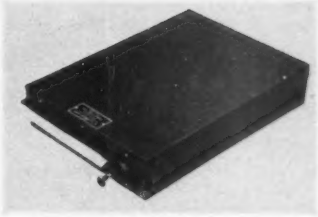
Once the photographer has taken his movies and had them processed, he then edits the film before sending it to Bell & Howell where a magnetic "soundstripe" is added to the edge. Recording, of course, is done by speaking into the microphone as the picture is projected on the screen. Voice and musical background may be added simultaneously. While the track may be erased for re-recording, a special interlock system prevents accidental erasure.

The Stereo taking and projecting lenses, including special screen and accessories, retail at $397.50; the Bolex equipment, including 16mm camera, $715.50. *Filmosound 202* 16mm magnetic-optical recording projector is priced at $699.00.

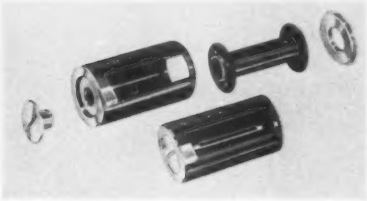
File for color transparencies



Stereo *taking* lens on Bolex 16mm



Ejector Paper Safe



Shirley Wellard Universal Cassette

Panorama BC Flash

Wirgin Lens Tester

Flash-Chek lamps


Astraflex II

# FOR MEMBERS ONLY

*by Victor H. Scales, Hon. PSA*

**FOR MEMBERS ONLY is dedicated to the news, views and activities of photographic organizations, with special emphasis upon camera clubs and their operational problems.**

**Photographic organizations are requested to direct their bulletins, house organs and releases regularly to: FOR MEMBERS ONLY, American Photography, 553-5 Avenue of the Americas, N. Y. 11, N. Y.**

## CONTEST SCORING SYSTEMS ANNOY CLUBS AND MEMBERS

MAJOR cause of annoyance in camera clubs is the scoring system employed for monthly contests. Regardless of the nature of the system, some members dislike it.

Some day some camera-smitten CPA may work out a system which will satisfy, if not please, a majority. Until then, and perhaps even thereafter, scoring systems will remain causes of dissension, bones of contention and subjects of unending debate.

### Interesting System

Fortunately, the dove of peace can find temporary respite in New England. There the Connecticut Valley CC, of Hartford, Conn., has worked out a scoring system which gets into decimals, but apparently not under the skins of the members. It facilitates member judging. Scores extra points for assigned subjects. Works with both prints and slides. Shows both monthly and accumulated scores. Makes every member a judge. The club likes it!

Beyond the fact that working the system calls for the use of a dimestore slide rule, the club's Color Veep Jim (James T.) Van Meter insists there's nothing particularly unique about it. Here's the way it works:

### How It Works

All members present participate in the voting, scoring both prints and slides on the basis of one to ten. Each member records his vote on a ballot, which is collected after the judging. Total vote scored by each picture is divided by the number judging to establish the average score. Total of average monthly scores to date is the season score.

Thus, in a recent "Bulletin" of the club, Veep Van Meter's score was recorded as follows:

131.2 JIM VAN METER
3.7 Summer Storm
* 4.8 Shingle Pattern
* 5.3 Decay II

These data reveal that the Color Veep had a season score to date of 131.2 points. In the current month he scored 3.7, 4.8, and 5.3 respectively. The asterisks indicate that two of his pictures were on assigned subjects and each entitled to an extra point.

Entries are limited to three slides and three prints per member per month, or 36 of each per year. Certificates are awarded each month for first, second, and third place, and for two honorable mentions. That member attaining highest accumulated score during the year wins a cup. The extra points for pictures on assigned subjects are counted only in the accumulative totals, and do not affect scores of the current month.

### Business of Judging

Judging is the first order of business at each meeting. Each member signs his ballot, and may have it back. The print and slide directors maintain master sheets to which the individual scores are transferred during an intermission after the judging.

The intermission occupies 15 to 20 minutes. During this period the members talk or eat, while the print and slide directors compute the scores and, with the aid of the slide rule, work out the averages. Then the meeting is resumed, and monthly certificates are awarded.

Says Veep Van Meter of this system: "We feel that we have a good system, but also realize that it is easier to use in a small club. Larger clubs may have to restrict the number of people voting, or use adding machines, or do the computing after the meeting.

"We feel that every member should vote, because that is the best way to cultivate a critical point of view. It teaches him to *see* a picture, and his own work benefits greatly by this training.

"On the other hand, it may be argued that many members are not qualified judges, and that their votes are not a true measure of the worth of a picture. We agree to some extent, and for that reason do not take the results of the competitions too seriously."

### General Discussion

"We encourage free discussion of the pictures during the voting. This procedure also is frowned upon by many. Yet here again we are helping people to *see* by hearing the well-qualified comments of advanced workers and by arguing controversial points while the picture is before them.

"Our objective is to learn better technique, and to increase member skill in recognizing worthwhile subject matter. Some of the pictures occasionally may suffer from poor voting, but we feel that we gain much more than we lose. So, we are not in favor of having the judging done by a group of three or four, salon style, even though the results may be better for the maker."

## EASTMAN HOUSE WELCOMES PHOTOGRAPHERS, CLUBS

THAT photographic brooder commonly known as Rochester, N. Y., has organized a place where camera clubs and clubbers are

welcome to exercise their cameras to their hearts' content—George Eastman House at 900 East Avenue.

Eastman House welcomes visits by camera clubs. And by individual photographers. And enables them, without let or hindrance, to set up their camera and make photographs *inside* the house, or *outside* in the gardens, or *anywhere*.

Any camera club which can walk or wheel or wing its way into Rochester Friday evening or Saturday morning can see much that is interesting at Eastman House, learn plenty about photography's background, and produce many excellent pictures under exceedingly hospitable conditions.

There *are* some difficulties. Eastman House is closed on Mondays. The management cannot provide guided tours on Sundays when the place is crowded.

So, the many members of many camera clubs long seeking opportunities to set up their cameras and to undertake architectural and garden photography under encouraging auspices can do it at Eastman House. In view of the popularity of the place, it would be wise to make arrangements in advance by writing the Curator, Beaumont Newhall.

Any club, or club member, or any photographer who wishes to do research in photographic history also is welcome at Eastman House. And invited to use the library. Already the place is becoming a historical research center for students and for representatives of technical societies, industrial firms and other organizations.

Camera clubs which cannot get to Rochester still can benefit by the work of Eastman House. Many of its photographic historical findings are published in a magazine, *Image*. And *Image* will go regularly to any club which cannot get to Rochester. Write Beaumont Newhall about *Image, too.*

## SALONS, EXHIBITS, CONTESTS KEEP CLUB MEMBERS ACTIVE

CAMERA clubs which have created committees to obtain information and to report on salons, exhibits and contests find that this is a helpful activity. It keeps members interested and busy, develops abilities and contributes greatly to the prestige of the clubs.

In the larger clubs, the information is presented for the benefit of all members who wish to participate in competitions. In smaller clubs, members may take turns participating, thereby sharing the work and the honors. Or the club may select specified events as club projects in which all participate.

Data on established print salons and color slide exhibits are presented regularly in AMERICAN PHOTOGRAPHY. The club committee has only to notice the dates and addresses as published, and to obtain further information and entry blanks by writing the auspices.

Recommended requirements for the conduct of well-managed salons and exhibits have been promulgated by PSA. The Society cannot attempt, or even presume, to enforce what are, at the most, merely recommendations. However, the older salons and exhibits have by now acquired sufficient experience and know-how so that matters proceed smoothly and all competitors are treated fairly.

### "Prize" Contests

Amateurs probably have more difficulty with, and complaints about, prize contests. Not infrequently, these contests are sponsored with the best of intentions by reputable business firms which never have considered, or even discovered, the problems involved. Promise of cash or merchandise rewards appeals to many. Somebody usually wins, although the conditions of the contests may be something less than fair to all competitors.

Possibly, in a contest for tangible prizes, amateurs know they are taking calculated risks and are not too disappointed if they lose. Yet the contests which are dismally unfair to all competitors—and even to photographers who are not in the competition—are those which append to the offer of prizes the statement that "all photographs submitted become the property of the sponsor."

### Getting Photos Free!

What this means is that the sponsor, whether intentionally or not, is obtaining hundreds, even thousands, of photographs for commercial use at the cost of two or three prizes. What this means to the competitors is that, regardless of whether they win or lose, the sponsors can use their photographs in any way for any purpose without reimbursing the makers thereof.

This is pretty smart business for the sponsors, who thus obtain a collection of photographs at small expense. It is not so smart for amateurs to contribute pictures of value to the sponsor without recompense.

### Proceed with Caution

Amateurs readily can ascertain which contests give them fair treatment by noticing whether the rules specify that *payments will be made for all photographs used* or that "all photographs submitted become the property of the sponsor." The amateur can afford to take calculated risks with sponsors which promise to pay for any and all photographs used. Sponsors which offer to pay only for a few pictures, yet intend to use all they desire, are asking amateurs to work for nothing. And simultaneously are cheating professional photographers of remunerative work.

## CLUB ACTIVITIES

• One of the next problems to confront camera clubs will be that of organizing a stereo section. Stereo is growing in popularity and many amateurs are wading in to the ears. Clubs which so futilely resisted color probably will give stereo more serious consideration. No passing fad, but an ancient art and well-established phase of photography, stereo should be welcomed by clubs which desire to enable members to understand and to practice all the photographic arts.

• *Good Idea:* Seeking to avoid the hopelessly stuffy formality which tends to spoil so many club dinners, Cleveland (Ohio) Photographic Society resorts to the catch-as-catch-can, buffet, or smorgasbord affair. No head table with uncomfortable big brass. No formal ceremony. No scrambling for tables. The entire affair is a scramble—in which self-service and plate-juggling automatically bring the members together. New officers are introduced, awards presented, announcements made, each event being signalled by the ringing of a cow bell!

• Speaking of activities for clubs, *Association News*, published by Chicago Area Camera Club Association, reports that in just one month Association clubs submitted 407 prints for the permanent files of the Chicago Historical Society, and 298 were accepted. Subjects included churches, schools, hotels, bridges, and scenes in Chicago area communities, plus people in action at work and play.

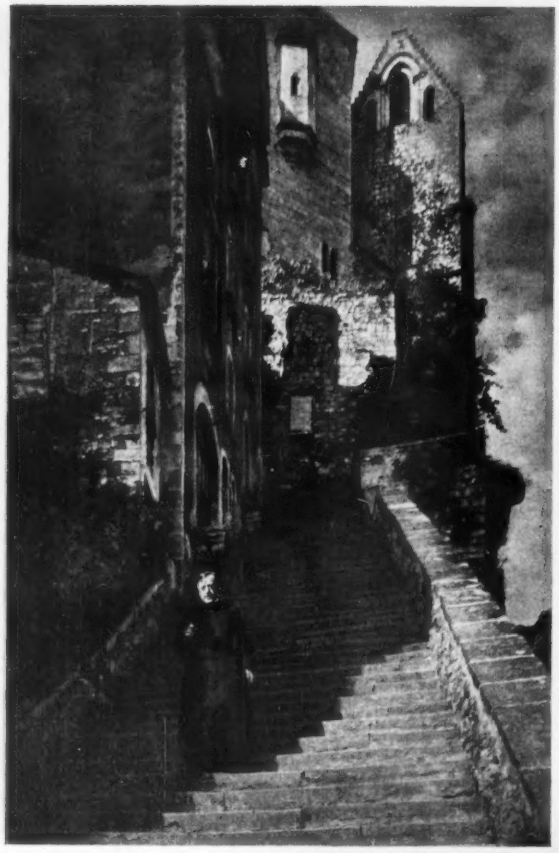
• Springfield (Mass.) Photographic Society stages an annual Table Top Night at which the Society's outstanding table-toppers arrange the settings, advise on shooting. With four different, individually-lighted sets, every member gets plenty of shots.

• *Good Idea:* Christchurch (New Zealand) Photographic Society makes members competing in monthly contests sign a contract to enter three prints or color slides every single month! Failure to enter one contest disqualifies the member for the whole year. This is a tough ruling, but the Society's *Highlight* says it is designed to encourage competition—and does!

• Jackson Park (Chicago) CC holds an annual Open House Evening for the families and friends of members. The program, which includes movies, exhibits and refreshments, give "darkroom widows" opportunity to see what goes on when hubby leaves home.

• Brattleboro (Vermont) CC recently invited a local naturalist to present his motion pictures of local flora and fauna. This fea-

(*Continued on page 67*)



# MONTHLY PRINT COMPETITION

**THE WEST ESSEX CAMERA CLUB**

THIS MONTH AMERICAN PHOTOGRAPHY is happy to present some of the work by members of the West Essex Camera Club, Caldwell, N. J.

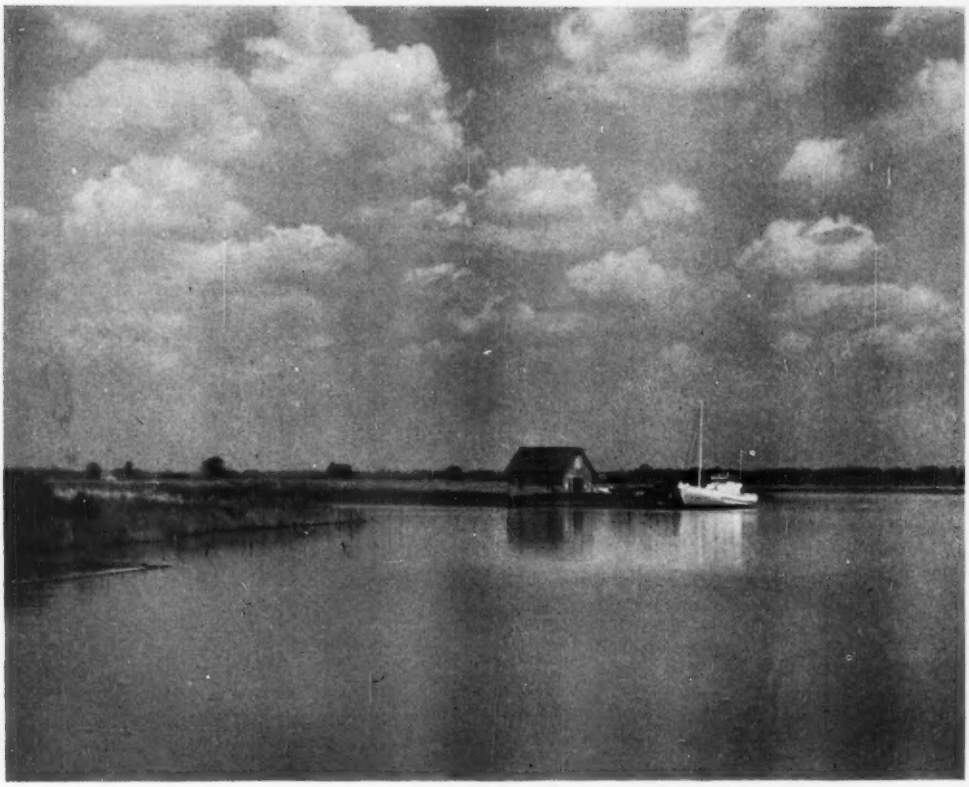
In their landscapes, seascapes and still life on these pages and page 66, photographers Swenson, Olsen, Stauber, Stickney, Murray and Sheldon have made worthy and interesting contributions. These prints echo the many rewarding efforts that are coming out of the clubs today. Each is to be congratulated.

*The Steps of St. Amadour*, left, by Mary C. Swenson

*Foothill Farm*, by Ralph Olsen

*Morning Mist*, by Harold Stauber

*The Breaking Waves*, by Fernald S. Stickney



*Peaceful Harbor*, by David A. Murray

*Harbingers of Spring*, by H. D. Sheldon

(Continued from page 63)

ture helps members better to understand both nature and photography.

• Memphis (Tenn.) Photographic Society would like to receive monthly bulletins and display print exhibits of other camera clubs. Arrangements may be made through B. W. Beyers, 1198 Faxon, Memphis, Tenn.

• Portland (Maine) CC, holding its 53rd Annual Salon in 1952, accepted color slides for the first time. This salon lays claim to being the oldest in the U. S. from the standpoint of continuous existence.

• *Good Idea:* Albany (NY) CC gives every member every year an opportunity to serve on the club's Board of Directors. Three new directors are elected annualiy. Members receive return cards on which they indicate willingness to serve, and thus automatically put their names on the official ballot. Members then vote for five of the candidates listed on the ballot. Three candidates receiving the highest votes become directors for three years. The next highest serves for wo years, and low-man-on-the-totem-poll gets the one-year job. This system simultaneously serves the ends of democracy, puts new talent to work, discourages steamrollers, and makes it impossible for members to complain loudly that they weren't asked!

• Tulsa (Okla.) CC, publishing the *Groundglass*, would like to exchange bulletins regularly with other clubs. Send copy of club bulletin to Mrs. Frances Elsperman, P. O. Box 2077, Tulsa, Okla.

• When holding field trips at distant locations, Miniature Camera Club of Philadelphia mails members mimeographed maps presenting a variety of routes, indicating mileages, and setting another date in case of stormy weather.

• Circle of Confusion (Tokyo) presents color slide shows at Tokyo Army Hospital every Monday evening. Mrs. Jean Herbert is chairman of the Hospital Slide Committee, which extracts slides from the members. Wonder if military hospitals in the U.S. wouldn't like such programs?

• *Good Idea:* Oakland (Calif.) CC explains to color judges—*in advance of the judging*—that the club expects criticism, when voiced, to be constructive; specific suggestions for improving slides found wanting; comparisons made only between exhibited slides; winning slides chosen without bias as to subject matter; and reasonable consistency in judging the good and bad features of all slides.

• Asheville (NC) Photographic Society is working with the Friends of Asheville Library to accumulate photographs recording the growth, changes and development of the home town.

• Members of the Seattle (Wash.) Photographic Society report, from sad personal experience, that dogs will eat color slides. The guardian boxer of one household knocked the slides from a table, breaking the glass mounts, and then ate the pictures—one of them a prize-winner!

• Three PSA camera clubs would like to exchange 25-print sets with other PSA clubs. Write to:

**Teaneck (NJ) CC, Henry Forrest, 1235 Kensington Rd., West Englewood, N. J.**

**Independence (Mo.) CC, Bert W. Landfried, 710 North College, Independence, Mo.**

**Salina (Kans.) CC, C. F. Lebow, 136 South Phillips, Salina, Kansas.**

• *Good Idea:* Baltimore (Md.) CC is cooperating with Baltimore's Peale Museum in producing the photographic illustrations for a book, *Two Centuries of Baltimore Architecture*. The club has organized its members into teams, each in charge of a captain and each responsible for making photographs of 12 designated buildings. The project has been converted into a contest, with the book's two authors as judges. Camera clubs in other cities with historical backgrounds might work up a similar project with local library, museum, or historical society.

• Kalamazoo (Mich.) CC opened one of its monthly competitions to camera clubs of the region. Prints were judged by Kalamazoo's members who selected the "ten best." If the experience proves entirely satisfactory the club plans to extend invitations over a wider area.

Kalamazoo is conducting another interesting program in the form of a small print contest between teams of "Seniors" and "Freshmen." The members of the losing team pay to the club treasurer a penalty of two dollars each. The income is used to finance meeting programs.

Meeting programs built about color slides of famous paintings, with discussion led by guest speakers who know their art, are being used by several camera clubs. No report yet on how the idea works, but it sounds as if it could be extremely helpful.

No reports either on where to obtain color slides of famous paintings, but it may be presumed that if a community has an art gallery and a camera club has members producing color slides the combination can be made to work somehow!

Of course, painting and color slides are vastly different media, but they do have facets in common. It will do color photographers no end of good to discover how the world's great painters have used colors and to what purposes.

• The Fine Arts CC of Evansville, Ind. recently met in the kitchen. Purpose: eating! Lady members and friends of the club prepared and served refreshments after competitions and discussions had ended. Life is so full of such wonderful things that sometimes it seems as if camera clubs now and then could forget the direct approach and sidle into photography via the kitchen, grille, cocktail lounge or other setting equipped for conviviality.

It seems to help the esprit de corps if the members occasionally meet under circumstances of great pleasure or some duress. Both appear to have a unifying effect which results in members working together and more closely.

• Camera clubs and other photographic organizations again are requested to send their regular bulletins, press releases and other informative data to: Organizational Editor, AMERICAN PHOTOGRAPHY, 553-5 Avenue of Americas, New York 11, N. Y.

• *Good Idea!* Buffalo (NY) Science Museum Photographic Club has established a Members' Service Committee. This committee actually is a "griping group." It receives the complaints and suggestions from members and sees to it that both reach the Board of Directors for official consideration and action.

Such a committee, functioning as a sort of shock-absorber, should be mighty helpful in every club. It helps the members by enabling them to get gripes off their chests easily. It helps the club by revealing causes of dissension before they cause serious trouble.

• Many camera clubs maintain a guest book wherein visitors are invited to inscribe their names and addresses. Then the guest book, which is maintained by the club secretary, goes to the Membership Committee, which sees to it that guests are invited to subsequent meetings—and ultimately become members. The guest book also solves the problems of what to do about strangers, and of how to break the ice. And also of how to get new members!

# BOOKS IN REVIEW

**Feininger, Andreas, *Advanced Photography, Methods and Conclusions*, Prentice-Hall, New York, 1952, $7.50.**

Feininger is, without doubt, one of the clearest writers on photography today and one of the ones who make the most sense. This and his previous book, *Feininger on Photography*, is the equivalent of a complete library on the subject.

This present book is divided into four sections. In the first of these, "Thoughts about Photography," the author describes the medium as he sees it. His chapter on what makes photography different from the other arts is particularly noteworthy. Feininger finds six points of differentiation: authenticity, accuracy of drawing, speed of recording, perfect transition from light to dark, monochrome instead of polychrome and reversion of positive into negative.

From these points he builds the outline of a reasoned and fruitful approach to photography. The remainder of this first section reviews technique and its necessity but also its misuse.

The second section of the book is devoted to experimentation, a necessity for the beginner and valuable, as well, to the more advanced worker. Feininger covers such subjects as how to test all kinds of photographic equipment, the care of equipment, building apparatus for one's personal requirements and the all-important experimentation with materials and processes. These include the necessary trials with ordinary materials to get the "feel" for them as well as such devices as solarization and reticulation. The section is concluded with a crisp little essay on "How a Professional Shoots a Picture."

The third section of the book is entitled, "Observation." In this he is more concerned with the photographer himself than with his mechanical equipment. His subject here is naturally a little more intangible than in the preceding subjects, but he handles it in the same down-to-earth way, rather than speaking with sweeping generalities. In effect, he is carefully detailing how to make a print effective, how to produce a specific impact desired by the maker.

The final, short, concluding section is called "Imagination." It includes an ingenious two-page chart on learning to see imaginatively, a chart which outlines most, if not all, of the possible variables in viewpoint, light, space, motion and materials used.

Throughout the book there are numerous fine illustrations, the work of not only Mr. Feininger but of many other photographers as well. The large size of the pages allows for large pictures which are well reproduced. This book, particularly in combination with *Feininger on Photography* issued a couple of years ago, makes almost a complete course in photography as well as a tonic for any of us who are getting stale. *Highly recommended.*

**Bomback, R. H., *The Movie Projector*, and R. H. Alder, *Home Movie Shows*, Cinefacts Nos. 7 and 8, Fountain Press, London, 1951.**

These two little booklets contain a great deal of information to the page. They are compactly presented—and compactly written. These paper-bound titles would be as valuable to the American hobbyist as to the British if they were more widely available here.

**Reyner, J. H., *Cine-Photography for Amateurs*, fourth edition, Chapman and Hall, London, 1951.**

Completely revised and dressed up, this is the latest version of an English "primer" for the home movie fan. It quite properly begins at the beginning, explaining in nontechnical language how a movie "moves" and continuing up to simple editing and good projection habits. While it was written with the British audience in mind, any beginner can find helpful information in it.

**Pearlman, Alec, *Pearlman on Print Quality*, Fountain Press, London, 1952, $3.25.**

Mr. Pearlman begins with a definition of print quality as might be expected. This first hurdle is accomplished with quite as much skill as his own prints show:

> *"It is more in the clarity of individual tones and in the separation of one subtle tone from the other that we are to find the difference between the ordinary and the excellent, and only by seeing the finest quality work are we able to measure our own work against it. The difference may be very slight in such a comparison but it is the cumulative effect of clarity in each individual tone that adds up to the final result of a beautiful print."*

In the next 110 pages he very skillfully explores all of the factors necessary to produce such prints. For anyone who would like to see a real change for the better in his own work, this little volume can be highly recommended.

# IT'S HERE AGAIN . . .

## The British Journal Photographic Almanac, 1952

**Every photographer needs the brand-new British Journal Photographic Almanac. The 596 pages contain articles, photographs and a review of the year's new equipment. Look at this list of contents:**

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**Church and Cathedral Photography** by Frank Smyth
**Present-Day Multi-Layer Colour Materials** by Jack H. Coote
**The Scope for Narrow-Gauge Scientific Cinematography** by Stanley W. Bowler
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## PHOTOGRAMS OF THE YEAR, 1952

Here are 44 full-page examples of the selected best exhibited in England during the last year. These pictures are introduced by a survey of the year's work there by the president of the Royal Photographic Society and there are notes on each of the pictures by R. H. Mason of the staff of the "Amateur Photographer."

This is the 57th edition of this work and one always eagerly awaited by salon photographers the world over.

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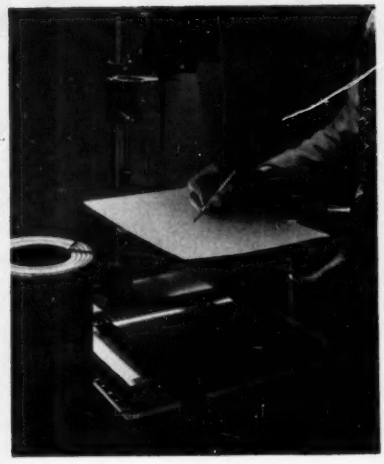
*Heading for the Barn*, James Thomas, APSA



# TRICKS IN ENLARGING

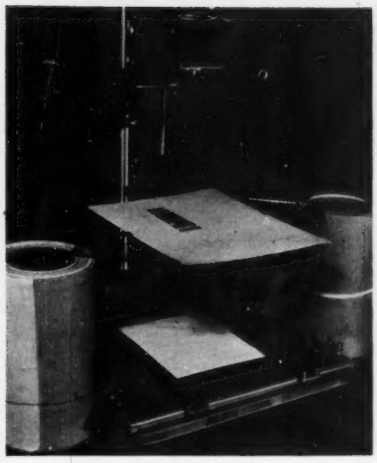
***By Don D. Nibbelink***

TRICKS OF THE TRADE—that's what any craftsman needs. And the more tricks in enlarging you know, the better enlargements you'll make! So let's examine briefly the special printing techniques concerned with diffusion, combination printing, texture screens, vignettes, and others. All set? Let's go!

### *Diffusion*

Print diffusion is the effect presented by an image that is not quite sharp. Why, you might ask, would anyone—after spending a considerable sum for precision-made, top-quality, coated camera and enlarger lenses—want to diffuse a print intentionally? Paradoxically, there are several good answers to this question. For example, diffusion will minimize the effect of minor negative defects, such as coarse grain and scratches, which may be particularly evident in prints made from comparatively large "blowups" from miniature negatives. Coarse retouching marks on portrait negatives can also be "hidden" in the same way. Furthermore, it is occasionally desirable from an aesthetic viewpoint to slightly diffuse subjects, such as portraits of women or "atmospheric" landscapes, to create a more pictorial impression rather than a quite literal one.

Diffusion may be divided into two general types, depending on the time at which it is introduced into the picture. The first is negative-type diffusion, generally obtained by placing a diffusion disc over the camera lens at the time of exposure. The actual diffusion disc or other type of diffuser, such as an adjustable portrait lens, which is used depends on the degree of diffusion desired. Because the highlights of a subject reflect the most light toward the camera, the corresponding areas in the negative will be affected (diffused) the most. Of course, this is not a printing technique, but you should be at least familiar with it as a common method of altering the appearance of a scene.



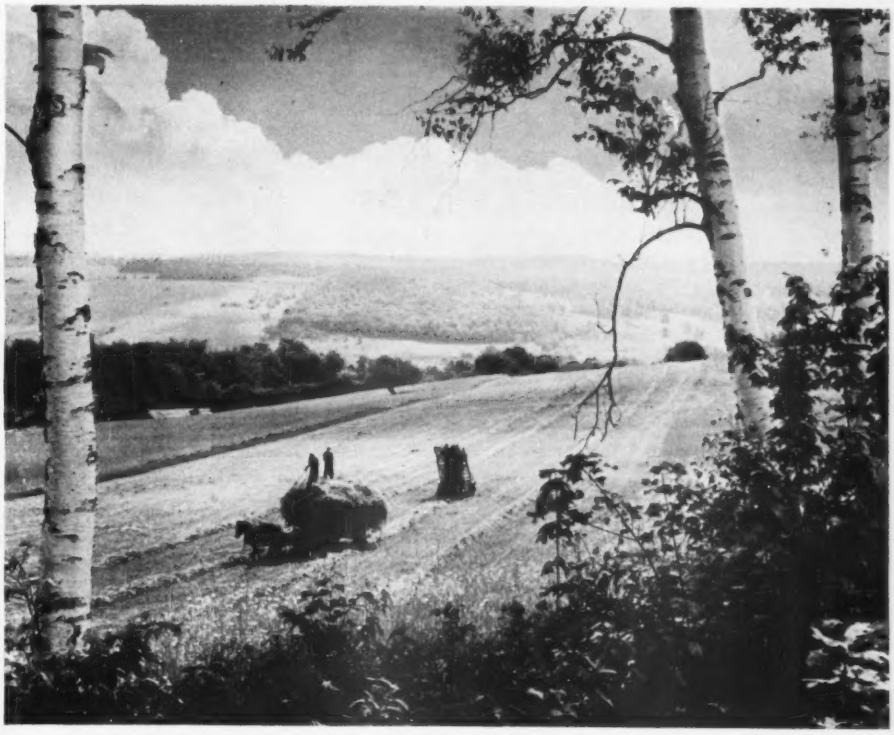
What a difference between the rural landscape across page and the one below! The main problem in adding clouds is to protect the sky area from being exposed while printing the foreground and then to keep the foreground area from being exposed while the clouds are printing. Accurate masking (above) solves it.

In the second, or positive-type diffusion, the diffuser is placed in front of the enlarger lens. This time it is the shadow areas which will receive the greatest exposure (from the clearer portions of the negative) and therefore will be the areas of greatest print diffusion.

There are advantages in each method. Although it is a matter of personal choice, generally negative diffusion is considered the more desirable. Back-lighted, wet-pavement bricks, back-lighted blond hair, sparkling reflections in a winding stream—all of these and many more are improved by a slight diffusion of the high-lights. As a general rule, all specular reflections (the most brilliant) are more pleasing when thus softened. Psychologically, you will find less "strain" on the eyes in viewing a diffused photographic reproduction than would be the case with an undiffused one. Of course, the disadvantage of the negative-diffusion method is that, even if desired, an absolutely sharp print cannot be made from a diffused negative. This can be overcome, however, by making two film exposures, one with and the other without the diffusion disc in place.

The advantages of positive diffusion are readily apparent. The original negative still may be as "sharp as a tack," and the degree of diffusion readily controlled and easily accomplished in a variety of ways. Diffusers can vary from a piece of nylon stocking, some ordinary plastic window screening, or a sheet of cellophane that has been slightly wrinkled, to optical-glass diffusers made

*Reprinted from* Bigger and Better, the Book of Enlarging, *by Don D. Nibbelink, FRPS, APSA, Garden City Books, Garden City, L. I., N. Y., 1952.*



*Heading for the Barn*, James Thomas, APSA

especially for this purpose. They all render the print less sharp and, of particular importance, "gray down" the highlights by partially scattering the light of the projected image. The advantage of optical-glass diffusers is that highlights tend to remain more brilliant because the scattering is confined more closely to the shadow areas.

The technique preferred by many print experts is to diffuse the image for only a portion of the total printing time, the remainder of the exposure being completely undiffused. This technique results in a combination "sharp-plus-diffused" image which helps to keep the highlights clear and sparkling but, at the same time, to hide coarse grain, retouching marks, etc. The proportion of diffused to undiffused exposure time will naturally depend on both the light scattering properties of the diffuser and the effect desired. As a general guide, a moderate diffuser might be used for 25 percent of the exposing time while the remaining 75 percent would be undiffused. A hint in regard to a diffused portrait print is to sharpen the eye catchlights with a spotting brush.

As you have probably surmised, any type or degree of diffusion will lower the print contrast. With slight diffusion the lowering of contrast is not appreciable. However, with moderate-to-heavy diffusion, it may be necessary to use a higher grade of paper contrast in order to achieve normal print contrast.

Better too little diffusion than too much. Excessive diffusion leads very quickly from degraded print quality to grayish mush. Several years ago the degree of diffusion in both landscapes and portraits did border on mush.

### Combination Printing

Of the many uses for combination printing, the most common is inserting clouds in a cloudless sky. And who among us, at some time or other, has not had a print which could be thus improved? The three general methods of adding clouds to a bald-headed scene are briefly:

1. Printing two negatives simultaneously
2. Rephotographing a combination paste-up
3. Printing two negatives separately

It's a rare occasion when two negatives just "happen" to be suitable for printing together, and copying a paste-up never results in top-notch quality. Consequently, only the third method will be discussed because it is sufficiently versatile for nearly all cases and produces very good results. It is a type of double printing which can be used not only to insert clouds, but to make other types of combination prints as well.

The key to success is extremely careful masking with the aid of cut-out paper masks. This is how to print clouds in a blank sky, step by step:

*Step 1.* Support a piece of clean plate glass about halfway between the enlarger lens and the easel. Do this by laying it across two up-ended blotter rolls, cigar boxes, or anything else which will give about the right height and is reasonably steady. The right height is about one-third the distance from the easel to the enlarger lens.

*Step 2.* Insert the foreground, or subject, negative. Focus it on the easel and stop down the enlarger-lens diaphragm to where it will be during the print exposure.

*Step 3.* Next, lay a large, discarded print or a piece of white or light-tone paper face down on the plate glass so that it will intercept all of the light from the projected image. Fasten this paper lightly in place with Scotch tape.

*Step 4.* With a sharp pencil, trace the horizon line, or the edge of the area to be masked, onto the paper. Remove the paper.

*Step 5.* With a *very* sharp knife, such as a surgeon's scalpel or an etching knife, cut just *inside* the traced line—into the foreground part of the mask—so that the projected edge of the foreground will extend slightly beyond the edge of the mask. This will prevent the formation of a white line at the juncture of the two images, as might be the case if you were to cut directly on the traced outline. The diffusion caused by the light passing the edge of the mask during the print exposure keeps this line from showing in the print.

The mask is now in two sections. The part corresponding to the foreground will be used to shield the bottom part of the paper while the sky is being printed; the top section will, in turn, be used while the foreground is being exposed. If the negative has a sky area so dense that it does not print, no masking of this area is necessary while printing in the foreground.

*Step 6.* Trim the sky section of the mask along the cut edges so that just a little of the sky image will "spill" over it during projection. The amount to be trimmed away is very small—$\frac{1}{16}$ inch or less if you are making an 8x10 print and up to $\frac{1}{8}$ inch for a 16x20 print.

*Step 7.* Project the image onto the easel; place on the glass the section of the mask corresponding to the sky, and tape it down. Get this mask into EXACT position—the glass can be shifted slightly to do this after the mask is taped in place.

*Step 8.* Determine and make the foreground exposure.

*Step 9.* Mark the top and bottom lightly on the edge of the printing paper, and place the paper in a light-safe place.

*Step 10.* Remove the sky mask. Do not move the foreground negative just yet. Then, using the projected image of the foreground negative as a guide, put the foreground mask in position on the glass. Be sure the mask is adjusted *accurately*, and then tape it down.

Suppose you placed a piece of tissue paper over your printing paper before exposing it. This is one of the textured screen effects you might achieve.

*Step 11.* Remove the foreground negative, insert the desired cloud negative, and readjust the enlarger if necessary. *Do not move either the mask or the easel.*

*Step 12.* Replace the printing paper in the easel PRECISELY as it was during the previous operation and print in the clouds, the exact exposure time having been predetermined.

*Step 13.* Remove the paper and process it according to the manufacturer's recommendations.

Your result should be a perfectly blended combination of the two negatives. If the two sections of the print do not match in some way, the cause of the trouble should be readily apparent and a new print made. Or, if there was only a slight misfit, the error can be concealed by careful spotting on the print.

That is all there is to it. After one or two attempts, it won't seem so difficult because, really, it is a simple procedure. Just be sure, before you start, that the direction of the main light in both scenes is the same. It's rather disturbing if, for example, a cloud negative is printed with a landscape foreground, and the sun position is different for each one.

### *Texture Screens*

Suppose that, just before exposing a sheet of paper on the easel, you placed a sheet of tissue paper on top of the paper, and a sheet of glass on top of the tissue to hold it flat. Then you made the exposure, giving a little extra time to allow for the light absorbed, scattered, and reflected by the tissue paper. This is the simplest way of making a texture-screen print. The print image will be broken up somewhat, or "texturized," according to the textured pattern of the tissue paper. The effect is, of course, more suitable for some subjects than it is for others.

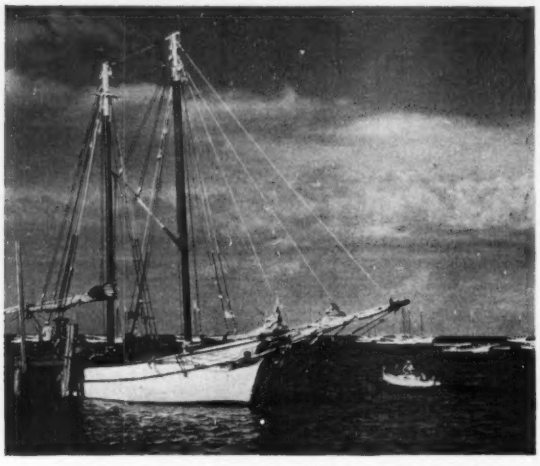
Texture screens can be improvised from many translucent materials or screenings which can be used in one or more thicknesses and for all or only a portion of the total print-exposure time. Or, you can make texture screens from opaque objects that have a textured surface, such as cloth or grained plywood sheets. To do this, glance a spotlight obliquely across the surface of the subject and make an underexposed negative of it with your camera. This texture-screen negative can either be combined with the subject negative and printed with it or enlarged separately onto a large sheet of film. In this latter case, this film can then be handled as a true texture screen and printed in contact with the enlarging paper in the same manner as the sheet of tissue paper.

A final word about using texture screens: Use them as often as you wish, but be sure they improve the final print or give the exact result you are seeking. The photographic process has enough merit to stand on its own two feet; to look good a photograph doesn't have to be disguised like an etching!

### *Vignettes*

A vignette is, of course, a print in which the edges of the subject—usually a head-and-shoulders portrait—fade gradually into the surrounding area of the printing paper. There's no mystery about it: an image of the head and shoulders is simply projected through an oblong hole in an opaque cardboard held underneath the enlarger lens so that the print borders remain unexposed. Keep the cardboard in continuous motion during the exposure so that the "fade out" between the exposed and unexposed portions of the print will be gradual. The best vignetting effects are usually obtained with high-key portraits of women and children.

However, if you have lost your enthusiasm for plain-



Why not try making black-and-white prints from color transparencies? Results can be very satisfactory.

vignetted prints, here's an idea: Try making a vignetted print that has a *gray* tone instead of a white tone surrounding the image. It's a little harder to make but, with the right subject, it may be more artistic.

The gray-tone background is produced exactly as though an ordinary vignette were to be made, except that the edges of the paper are flashed after the vignetted subject exposure has been given. One of the most convenient ways to do the flashing is this: After the subject exposure, take out the enlarger lens board but leave the negative in place. Have ready a dodging wand of about the same size as the oval through which the subject image was projected. Take the exposed paper out of the easel and mark it so you can tell which side is the top and which is the bottom. Now place a test-strip paper on the easel, and with the usual test-strip exposure technique, find out how much exposure will produce the desired shade of gray on the print borders. Replace the paper with the portrait image oriented as it was previously. Turn on the enlarger, using the dodger to protect the paper area exposed to the subject from the flashing light and giving the borders the amount of exposure as indicated by the test strip.

It will probably take a few trial prints before you get the exact effect desired, but it'll be worth your while when you do. Just don't start to make a vignette with your last sheet of paper!

### *The Emmermann Process*

If you enjoy print making at all, you ought to make at least one print by the Emmermann Process just for the fun of it. The method is easy to follow and requires no additional equipment or special solutions. Its real purpose is to condense or flatten the scale of an extremely contrasty negative. In effect, it enables you to retain all possible shadow detail of a contrasty negative when printing for the highlights. Have you "lost" some shadow detail recently? This is how you can "find" it:

Soak the paper in the developer, place it on the easel, and give the paper two separate exposures, one for the shadows and the other for the highlights. Due to the action of the developer already in the emulsion, the shadow details appear during the interval between the two exposures. This silver density then acts as an automatic mask or shield which prevents further shadow exposure while the highlights are being printed. The paper is finally developed in a tray for the usual time. Sounds easy enough; a bit messy perhaps, but not difficult.

To familiarize yourself with the technique, make a few practice prints and compare them with a print made in the normal way from the same negative. You will quickly learn to detect the reduction in print contrast and to know when to use the method of "tonal expansion."

Before you start, however, two words of caution: Not all enlarging papers are suited to the Emmermann Process since the double-exposure treatment may tend to reverse them. Secondly, be sure to use *fresh* developer to help keep the print from staining, since the total development time is somewhat longer than normal. With fresh developer, you should experience no difficulty with staining; if you do, add ¼ ounce (8 ccs) of 10 percent potassium-bromide solution to each quart (or liter) of the developer working bath. A final suggestion is to keep safelight illumination rather dim since the paper will be handled under darkroom conditions longer than usual.

Here is the Emmermann Process in detail: Select one of your negatives that has a very long density scale—for instance, a negative with adequate shadow detail and excessively dense highlights. This negative may have been normally exposed but over-developed; or the extreme contrast range may be due to extreme differences in subject brightness. If this negative were printed in the usual manner, chances are that the shadows would have to be retarded by dodging and/or the highlights "burned in"

with extra exposure. Even then it would probably be a difficult job to squeeze the tonal extremes together sufficiently. The important consideration is, however, that the negative *does* have the shadow detail you wish to retain. Even this process can't make something out of nothing!

With your long-scale negative in the enlarger, make the best print you can in the usual way, carefully noting the exposure time and the contrast grade of the paper. Then take another sheet of paper *of the next harder grade* and soak it in a tray of fresh developer for 1½ minutes. To help prevent the faster enlarging papers from being fogged by the safelight, soak the paper either emulsion side down, or with the safelight turned off. Place this paper face up on a sheet of glass or the bottom of an upturned tray, and with a cloth or rubber squeegee remove the excess developer from both sides of the paper.

To help keep the easel dry, cover it with a large sheet of celluloid or acetate. Now position the developer-soaked paper on the easel. The limp (it shouldn't be dripping!) paper will be a little stubborn when it comes to its lying flat on the acetate sheeting. An oblique glance at it will show you that the trouble is caused by air bubbles which can be eliminated easily with a small roller or squeegee. Work rapidly at this point because the longer the developer-soaked paper is out of the tray, the more chance there is of encountering stains from oxidized developer.

The masking, or shadow, exposure should receive about half the exposure time required for the normal print. If, for example, the normal print requires ten seconds' exposure, make the first exposure only five seconds. After the enlarger has been switched off, *do not move the paper;* just let it develop on the easel for 1½ minutes. When the shadows have developed, expose for the highlights by giving 1½ times the normal print exposure. In this hypothetical example, the second exposure will be 15 seconds. Remove the print from the easel and develop it for no longer than 1½ to two minutes in the tray of fresh developer.

Now compare the two prints you have made. There is little difference in the highlight areas and middle tones. But notice the blocked-up shadows in the normal print and the full shadow detail in the one produced by the Emmermann procedure. Of course, the difference is due to the "automatic" mask formed by the first exposure and development. This thin, top veil of masking silver protects that portion of the paper emulsion underneath it from further exposure. Because the second exposure does not penetrate to the lower levels of the emulsion, both extremes of the negative's tonal range are preserved. Incidentally, this masking principle is the same as that involved in making contact prints on the printing-out paper often used for temporary proofs by portrait photographers. These reddish-purple prints are notable for their excellent shadow detail which is produced by the density being built up and masking the shadow areas as the exposure increases.

The ratio of ½ the time of the normal print exposure for the first exposure to 1½ times for the second exposure will serve as a guide for your trial Emmermann print. In most cases this will produce satisfactory results, but the ratio may be varied as necessary. The clue to the proportion of the total exposure time that should be allotted to the masking exposure depends on the characteristics of the negative. Contrasty negatives having little shadow detail should receive proportionately less total exposure than high-contrast negatives in which the shadow detail is adequate.

Oh, yes, when you're through printing in this manner, don't forget to wipe off the easel with a damp cloth and then dry the easel thoroughly.

### *Matching the First Print*

Here's a problem that occurs quite often in the printing experience of most photographers: Suppose you have made an excellent print and then wish to make several more just like it. The duplicate prints may be wanted for

To enlarge a wet negative in a glass negative carrier, the trick is to combine negative and glass properly.

gifts or for sending out simultaneously to several salons. Or perhaps you are a professional photographer and have had a customer reorder additional prints from a portrait sitting. In any case, probably no permanent record was kept of the enlarger lens stop, the exposure time, and the development time used in making the first print. Obviously, the first attempt at duplication will have to be on a trial-and-error basis. One of the best ways to do this is to place the sample print you are trying to match in a tray of water (provided it hasn't been mounted, of course!) next to the developing tray. If necessary, arrange the safelight so that the developing print and the finished print will receive the same amount of illumination. When wet, the sample print will have the same reflection characteristics as the one wet with developer. This allows a much closer match to be made than if you attempted to compare a wet print with a dry one. The

system is, then, to expose the new print and develop it until its density matches that of the wet comparison sample. When the two are judged as identical, *quickly* remove the developing print and immerse it in the stop bath.

There is one thing to watch for, however, in matching prints in this manner. Some enlarging papers have in their emulsion a yellowish sensitizing dye which quickly becomes colorless when the print is placed in the fixing bath. In addition, the portions of the light-sensitive emulsion not used to form the image partly "veil" the image while the print is in the developer and in the stop bath. This "veil" also quickly disappears shortly after the print is placed in the fixing bath. Thus these two "temporary" effects—the yellowish-dye tinge and the slightly veiled image—may mask the subsequent appearance of the fixed print. The natural tendency is to let the print in the developer go too dark, particularly if you are watching (and comparing) the shadow details. The clue is, then, to match the highlights since they are least affected by either of the above paper characteristics.

Regardless of whether the job at hand is matching a previously made print or making the first print itself, it is quite desirable to know whether the paper being used exhibits the tendencies described above. It helps in judging the depth to which any given print should be developed. A simple test to find this out can be made as follows:

Expose in succession two moderately sized test strips, taking care to include the same shadow area in each of them. Develop them together, and place them both in the stop bath, *but carry over only one of them into the fixing bath.* Now turn on the white light and compare the two pieces. Is the fixed image darker than the unfixed image? Leave the white lights on and immerse the unfixed strip in the hypo. Watch to see if the action of the hypo darkens it appreciably. If the fixing bath changed the visual appearance of the image, you will know about how much of the haze to discount when judging prints on that particular paper while they are in the developer.

### *Enlargements From Color Transparencies*

Have you ever wondered whether to take two cameras along on a vacation trip—one loaded with black-and-white film and the other with color film? This discussion may help you decide since it is easily possible to make excellent quality black-and-white prints from good color transparencies.

The out-of-the-ordinary step is to make a film negative by enlarging the color transparency, just as you would an ordinary negative, but using a sheet of film on the enlarger easel instead of a piece of paper. The resultant negative is enlarged just like any ordinary negative.

There are a few recommendations to note that will be helpful: Place the transparency emulsion side *up* (toward the light source) in the negative carrier so that the final paper print won't come out reversed; mask off the rest of the negative carrier so that no stray light will lessen the projected image contrast; cover up any light leaks from your enlarger lamp house so as not to fog the sheet of film. The exposure will probably have to be determined by the usual test strip method until after you have performed the operation a few times and are familiar with the conditions. If you have the Kodak Flurolite Enlarger A or the Kodak Hobbyist Enlarger, a three-diameter enlargement on Kodak Panatomic-X Sheet Film will be about 25 seconds at f/8. Panatomic-X Sheet Film is, incidentally, a good choice of film materials for this job and should be developed for about five minutes in a tray at 68 F in Kodak Developer D-76. Of course, other film-developer combinations can be used, but the important thing is not to get the negative too contrasty.

As you would suspect, some color slides make better black-and-white prints than others. First, select one that is absolutely sharp, scratch-free, and normally exposed. A *slightly* dark transparency will also reproduce well but a light transparency will never make a really good print. Next, be sure that the transparency is clean and dust-free. In most cases light fingerprints or oily smudges can be removed by breathing on the transparency, then wiping it gently with a soft cloth. Carbon tetrachloride *may* cause streaks or spots by removing some of the protective lacquer with which the emulsion side of the film is coated. If this occurs, the lacquer should be removed completely, and film lacquer applied.

You may want to consider using a colored filter over the enlarger lens when exposing the film. A filter here has about the same general effect as the same filter on the camera lens when photographing an actual scene. For example, if you want a contrasty dark-sky-white-cloud effect in the final print, use an orange (G) filter over the enlarger lens. If you want to lighten the greens, use a green (X1) filter. With panchromatic negative materials, the Kodak Wratten Filter X2 (No. 13) is suggested for improved rendering of flesh tones. However, no filter at all will keep the tone relationships about the same as you see them in the color transparency and for general work no filter is required.

### *Enlarging From Wet Negatives*

*Only if it is absolutely necessary*, a satisfactory enlargement can be made from a wet negative. And when is it necessary? Well, it depends entirely on the circumstances, such as a news break or some other instance when a deadline must be met and there is not time to wait for a negative to fix, wash, and dry normally. This technique isn't something you'll need very often, but it is handy to know in case of an emergency.

Let's pick up the process at the point where the negative is in the fixing bath and you have just turned on the white light. Incidentally, if you're in a real hurry, you'll be using one of the concentrated liquid fixing baths, such as

Kodafix Solution, instead of one of the ordinary hypo baths.

As soon as the negative has cleared, i.e., has lost its "milky" appearance, give it a quick rinse under a stream of running water. Then, depending on the kind of negative carrier you have, there are two general techniques which can be used.

**For glassless negative carriers.** Place the negative on a sheet of glass and lightly squeegee all the excess water off both the front and back surfaces of the negative. Check the negative carefully for water droplets since, if present, they will show up as objectionable "blobs" in the print.

**For glass negative carriers.** Use only the bottom glass of the carrier. If this glass isn't easily removable—and it isn't in some carrier types—wet the negative and quickly "roll" it emulsion side down on the glass. This "rolling" must be done by starting with one edge of the negative and proceeding evenly so that no air bubbles will be trapped between the emulsion and the glass. Wipe off the bottom of the glass and the top of the negative—careful. don't move it—and make whatever prints are necessary.

If the bottom glass of the carrier *is* removable, you may prefer this variation of the above method: place both the negative and the glass in a tray of water and bring them together *underneath* the surface of the water. Draw them out together and dry off the bottom side of the glass and the top side of the negative. Do not place the top glass on the negative—just put the bottom glass and the negative in the enlarger without breaking the moisture seal between them. Another, perhaps superfluous, "don't" is: don't use glycerine or any similar viscous liquid to try to keep the negative from drying out. If you do, hordes of little air bubbles will plague you. Who wants to goop up an enlarger with glycerine, anyway?

In each of these two techniques for printing from wet negatives, it is easy to see why the enlarger should not be heated before starting, and why speed in working is imperative: The negative must not begin to dry out due to the heat from the enlarger. If this happens, the negative may stick to the glass or curl up out of the focal plane. Make those exposures and get that negative back into the fixer as soon as you can.

This is an example of a scene with brilliant highlights and deep shadows which has benefited by an expansion of the tonal scale. The negative *must* have adequate shadow detail if these areas are to record satisfactorily in the print.

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# SALON CALENDAR

| Salon and Exhibit | Address | Closing Date | Entry |
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| Third International Colour Print Exhibition<br>The Camera Club<br>London<br>(Nov. 1-Nov. 29, 1952) | E. C. Codd, Hon. Secretary<br>The Colour Group<br>The Camera Club<br>23, Manchester Sq., London, W. 1 | Oct. 11, 1952 | 4 prints<br>$1 fee<br>* |
| First Mexican International Salon of Photographic Art<br>Mexico City<br>(Nov. 15-Dec. 15, 1952) | Ray Miess<br>1800 N. Farwell Ave.<br>Milwaukee 2, Wis.<br>—or—<br>Club Fotografico de Mexico<br>San Juan de Letran No. 80<br>Mexico 1, D.F. | Oct. 15, 1952 | write for details |
| Ninth Chicago International Color Slide Exhibition<br>Museum of Science and Industry<br>Chicago, Illinois<br>(Nov. 8, 9, 15, 16, 1952) | Arthur Papke, Chairman<br>4106 Gilbert Ave.<br>Western Springs, Ill. | Oct. 18, 1952 | 4 slides<br>$1 fee |
| Santa Barbara International Exhibition of Nature Photography<br>Santa Barbara, Calif.<br>(Nov. 1-10, 1952) | William A. McBride<br>1222½ State St.<br>Santa Barbara, Calif. | Oct. 18, 1952 | 4 prints and/or slides<br>$1 fee<br>* |
| Eighth Mississippi Valley Salon of Photography<br>*color section*<br>Founders Hall<br>(Nov. 8, 1952)<br>Cabanne Branch Library<br>(Nov. 5, 1952)<br>St. Louis, Mo. | E. A. Tucker, Chairman<br>3625 Carter Ave.<br>St. Louis 7, Mo. | Oct. 22,1952 | 4 color slides, 2x2<br>$1 fee<br>* |
| Twenty-Sixth Annual International Exhibition of Photography<br>Usher Art Gallery<br>Lincoln, England<br>(Dec. 6, 1952-Jan. 4, 1953) | A. J. Hawkins<br>Lincoln Camera Club<br>Branston<br>Lincoln, England | Nov. 8, 1952 | 3 classes:<br>(1) pictorial<br>(2) architectural, scientific and record<br>(3) natural history<br>prints and slides<br>write for details |
| Second Salon of Nature Photography<br>*Wild Birds Division*<br>New York State Museum<br>Albany 1, N. Y.<br>(Dec. 1-31, 1952) | W. J. Schoonmaker<br>New York State Museum<br>Albany 1, N. Y. | Nov. 10, 1952 | 4 prints<br>write for details |
| Thirteenth International Photographic Salon of Japan<br>Galleries of Mitsukoshi<br>Tokyo, Japan<br>(Jan. 15-22, 1953) | Thirteenth International Photographic Salon of Japan<br>The Asahi Shimbun Bldg.<br>Yurakucho, Tokyo, Japan | Nov. 15, 1952 | 4 monochrome prints<br>6 color slides, 2x2<br>write for details |
| Color Division Competition<br>PSA | W. H. Savary, Contest Director<br>R.F.D. 2, Box 221<br>Plainfield, N. J. | Nov. 20, 1952 | 4 prints by any process<br>write for details |
| Lucknow International Salon of Photography<br>The United Provinces Amateur Photographic Association<br>Lucknow, India<br>(Feb.-Mar., 1953) | S. H. H. Razavi<br>63 Yahiapur<br>Allahabad-3<br>India | Dec. 15, 1952 | monochrome and color<br>write for details |
| Second Salon of Nature Photography<br>*Scenery Division*<br>New York State Museum<br>Albany, N. Y.<br>(Feb. 1-28, 1953) | W. J. Schoonmaker<br>New York State Museum<br>Albany 1, N. Y. | Jan. 10, 1953 | 4 prints<br>write for details |
| Annual International Exhibition of Photography<br>Gants Hill Municipal Library<br>Ilford, Essex<br>England<br>(Mar. 2-14, 1953) | R. D. Lambert<br>6 Michigan Ave.<br>Manor Park<br>London, E.12 | Jan. 28, 1953 | 4 prints<br>8 slides<br>write for details |
| Tenth Syracuse Salon of Photography<br>Syracuse Museum of Fine Arts<br>Syracuse, N. Y.<br>(May 6, 1953) | Allen Ruch, Salon Director<br>1421 Butternut St.<br>Syracuse, N. Y. | Apr. 20, 1953 | $1 fee<br>*<br>write for details |

* Photographic Society of America rules observed.

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